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1961

U.S.
Department
of Health,
Education,
and Welfare
Annual Report



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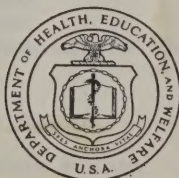
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U.S. GOVERNMENT PRINTING OFFICE
WASHINGTON : 1962

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

As of June 30, 1961

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Letter of Transmittal

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE,

Washington, D.C., December 1, 1961.

DEAR MR. PRESIDENT: I have the honor to submit herewith the annual report of the Department of Health, Education, and Welfare for the fiscal year ending June 30, 1961.

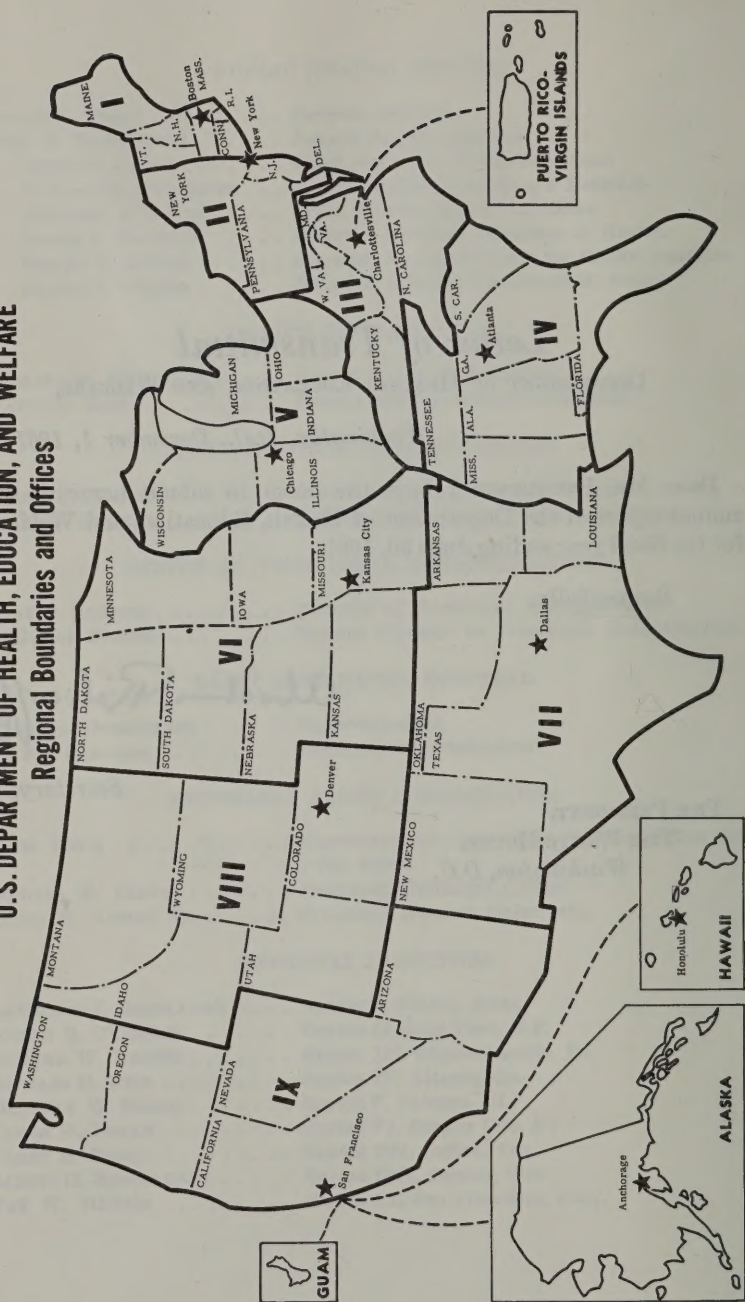
Respectfully,

Abraham Ribicoff

Secretary.

THE PRESIDENT,
THE WHITE HOUSE,
Washington, D.C.

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE Regional Boundaries and Offices



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{ A detailed listing of the contents of this report, by }
{ topic headings, will be found on pages 407-418. }

In the middle of fiscal year 1961, a new administration came into office. There came to the Department a new Secretary and with him a new direction for the Department. The body of this report, in which the operating agencies of the Department present specific accounts of their work, covers the entire fiscal year (July 1, 1960, through June 30, 1961). This, the Secretary's portion of the report, however, deals principally with the second half of the fiscal year—the first months of stewardship—and beyond into the continuing plans for the Department in 1962.

The Secretary's Report

A BEGINNING is a time for clarity, for reexamination, and understanding.

When I came into the Department, I knew it was a complicated and sometimes controversial organization—a busy department with over 100 different programs—but a department of great interest to me and to the American people because its activities concern the human everyday problems of men, women, and children.

As Governor of Connecticut, I was familiar with the pattern of Federal-State cooperation by which this Department has played such a helpful role.

Now that it had become my responsibility, it was necessary to see exactly what was being done, what should continue, and in what direction. I wanted to look at the Department's past commitments, at its problems and priorities, and at its traditional solutions—to measure past answers against today's problems.

We Take Inventory

The primary interests of the Department of Health, Education, and Welfare are implicit in its name—the health, the education, and the welfare of all the people.

It is the department of everyday concerns. The programs of its five major operating agencies—the Public Health Service, the Office of Education, the Social Security Administration, the Food and Drug Administration, and the Office of Vocational Rehabilitation—are concerned with the home, the school, the hospital, the community, the air around us, the water in the tap, the food on the shelf, the drugs in the medicine chest, the lipstick in the purse, the bank account, and the hope for tomorrow. Taken together, these things add up to the happiness or unhappiness, the meaning of the future for men, women, and children.

There can be little welfare without health, and the deprivations and frustrations of unsatisfactory environment or insecure economic position can lead to physical ailments, mental illness, and delinquency. Inadequate education is often the reason for the financial problem—lack of training leading to unemployment or failure to advance.

The Department administers programs of its own and supports—with money and advice—promising projects and research of others. Nearly 90 percent of its appropriation went out as grants-in-aid to the States, non-Federal institutions, and individuals in 1961. They serve greatly to strengthen State departments of health, of education, and of public welfare. In addition to the direct aid they afford these activities, the grants have considerable impact upon the economy through the dollars channeled into many communities and the protection and restoration of productivity of the individuals kept in health, returned to self-support, or advanced in learning.

The policy of the Department in these grant programs—as laid down by the Congress and the Executive and endorsed and enforced by tradition—is not to dictate, control, or interfere but to provide means and inspiration, guidelines, and stimulation for the greatest possible range of ingenuity and enterprise in improving the conditions of the people.

Before we began our inventory, we had decided that we would not be satisfied with generalities.

We were—and are—interested in the specifics of action; not rigid, arbitrary specifics, but feasible and developing ways of moving forward on many fronts toward long-time gains. The specifics of action are always simple in the past tense—what we did, how we did it. The specifics of the future are more difficult. What do we want to accomplish? What is important for us, in this contemporary world, to accomplish? How can we accomplish it?

What We Seek

We believe the Department should be idealistic in philosophy and in program goals, practical in program operations.

Our objective remains the same—helping to improve the conditions and prospects of man. The means change because the problems change. We cannot afford to be bound by tradition that makes fine history but no current progress.

As to the meaning of our words—when we say “aid” to education, we mean exactly that—help for education, not control. Control remains with the States and localities as it always has in the long Federal-State partnership in education.

When we say “welfare,” we do not mean only financial assistance. Welfare should not be just relief money spent each month and needed again the next. To us, welfare should mean a return to self-help, self-reliance—wherever possible—through training, retraining, and rehabilitation for young people, for old people, for middle-aged people, for handicapped people—in short wherever needed. Until this past session of Congress, for example, aid was not available to a family

with dependent children if the father were present in the household—even if he were unemployed. If the father deserted, however, his family could become eligible. If he stayed and tried desperately to cope with family problems, he and the rest of the family were penalized for his presence. This just does not make sense. We want to hold families together, not drive them apart.

For the truth is that the social welfare or the security of an individual depends upon many factors other than money. For almost everyone, there is little security possible without a sense of having a place in the world. For the child, that usually means a place in a family. For the elderly, it can mean a place in the familiar surroundings of the home community and the continuation of some activity or responsibility to give meaning to living. For the adolescent, both family and community relationships are important in this transition period of life. The Department seeks to help people—child, youth, or adult—find or maintain their place in the world.

Point of Vantage

The Department enjoys a perspective for viewing—beyond its own activities and programs—all interests engaged in the search for solutions to problems of health, education, and welfare. Such a point of vantage should make it possible to see things whole—the achievements and the gaps, the possibilities and the difficulties.

This could be an exciting view to have, a stimulating, prodding summary—moving citizens, professions, and government to action.

The Department has long been a collector and reporter of information on what others are doing in the fields of its interest, but too often this has seemed a mere statistical delivery service, without adequate assessment of the information and its significance to the national interest.

It seems to us that the Department of Health, Education, and Welfare, as policy adviser to the President and as a resource for the Congress and the people, should be more creative, more critical, take more initiative, and seek to stimulate a ferment of ideas. It should make available reports of progress and problems encountered in specific operating projects in certain communities to help other communities and organizations know what is being done and thought and found to work elsewhere. Citizens should know what the national situation is in health, education, and welfare. They should look at the problems and recognize the needs.

Programs of Prevention

Wherever possible we seek preventive measures—preventive medicine, preventive education, preventive welfare. The first, preventive

medicine, is a fairly familiar phrase covering quarantine activities, sanitation, safety campaigns, inoculations, annual checkups, and other medical care in health as well as in sickness. The other two are perhaps strange to the eye and ear but not to our planning.

What is preventive education? Education can obviously prevent ignorance and illiteracy. In addition, education of quality and training keyed to the needs of the individual student can help prevent the economic distress suffered by the untrained person who cannot find employment or cannot advance. Education and training can help prevent delinquency arising out of resulting frustrations and despair. They can prevent the waste of talents needed by the Nation and abandonment of hope by the retarded and handicapped, cruelly and mistakenly termed "uneducable."

Preventive welfare is a strange and—to the ear—rather contradictory phrase. Perhaps it would be better expressed as anticipatory welfare. It means social services—not necessarily money and certainly not money alone—given in time, *before* a family breaks up or a person breaks down from accumulated distresses and crises—services designed to prevent ultimate dependency. It means also services designed to prevent continuing, lifetime dependency by providing rehabilitation and training to dependent persons already on public assistance rolls to restore them to self-support, self-care, and self-esteem. Restoration services should not be limited to persons capable of returning to gainful employment; they should be available to anyone able to reach a goal of even partial self-care.

The dollar value of the prevention of anything is impossible to estimate, for it is difficult to prove just what has been prevented or the degree to which a problem has been retarded. But we have seen enough notations of school dropouts and of broken homes on the records of juvenile delinquents to know that these things can lead to delinquency and are worth trying to prevent.

The lack of education revealed by the chronically unemployed and the inability of the professions and the Nation to obtain well-trained people show us the need for preventive education. It is too costly to do without.

To prevent scarring and wasting of lives—by improving health, increasing educational opportunity, and advancing economic security—seems a noble and rewarding mission to us.

A Time of Change

It is not surprising to us that many parts of our program must change, that new things must be tried, for we live in a time of accelerating change.

The texture of society is different, the design for living so altered in the last few years that even the stages of the change have been obliterated. It is as though the patterns were destroyed and new ones were made from different materials by different beings for different beings. We have faced changes century to century before, and generation to generation, but these were usually gradual changes in which traces of the origins remained. The shadow of each day's change grew a little wider but did not suddenly blot out the past beyond remembrance. This is no longer true today. Space is wholly new as far as ordinary human understanding and "occupancy" are concerned. Automation is new beyond any previous technology. Radioactive fallout from man-made weapons is new. The dimensions of time and space have changed.

And so it is not entirely a criticism of the past operations in the Department that we seek so many new approaches in our programs today. The necessity for some could not be anticipated, and many are very difficult to achieve.

A few of our new problems are caused by evils or by failures or by neglect and callous disregard for human needs, but most are actually the products of our successes.

In the field of food and drugs we are faced with continuing change growing out of the progress of technology—new methods of growing, processing, and packaging foods for our convenience, new discoveries in drugs which save lives, but which also can have dangerous side effects. The sales of medicinal chemicals and of cosmetics more than doubled between 1948 and 1958. Chemical additives are used in processing and packaging food. Farmers use pesticides on their crops. If they didn't, we would not have our present abundance of food; but, if food were not checked and pesticides regulated for safety, abundance could well be a serious health hazard for us.

Environmental health problems change because of developments and improvements in manufacturing, which give us essential products but which also necessitate disposal of waste products, chemicals, and gases. The crowding of population into "convenient" urban centers multiplies the problems of disposal of human waste materials. Radiation hazards exist not only from weapons testing but also from our greatly increased use of nuclear energy in medicine, industry, and elsewhere. The automobile adds exhaust fumes to the "fresh air" of our cities. Stephen Vincent Benet said of the early days of this continent, "There was . . . in the air . . . a medicinal quality that brought health to those who breathed it." Even allowing for poetic license, this is no longer true.

Education faces not only pressure of numbers but necessity for constantly updating its information and adding new subject matter.

Here, too, it is man's progress—our fantastically successful conquest of time and distance—that causes problems. As the world contracts and once faraway, strange places are no longer far in time and must not be allowed to remain strange in understanding, the need for new language studies expands. The new sciences and the world of space require whole new curriculums of studies and teachers qualified and equipped to teach them.

Medical advance often brings change upon itself. The lengthening of the lifespan has brought a higher proportion of elderly persons in the population. This in turn has brought additional problems in the treatment of chronic diseases and ailments of the aging, and a consequent need for better home care, nursing homes, and methods of care outside of already crowded hospitals.

Improvements in therapy for the mentally ill make it possible for many to return to their home communities. There they and their families need access to guidance, assistance in adjustment, employment help, and frequently the services of day hospitals or outpatient mental health clinics.

Thus every time we solve a problem, we seem to pose another—and sometimes several. We never quite catch up, because, before we get where we are going, the destination changes.

The various agencies of the Department came into existence because of change and problems. They pioneered; almost everything they did was "a first." They are finding stimulation in pioneering again.

Forward Movement—1961

Our new appraisal and our new plans are bearing fruit. Within these few short months a number of concrete results are apparent.

★ A new and more comprehensive program providing greatly strengthened aid to communities in the development and improvement of health services outside the hospital got underway.

Designed to increase the availability, scope, and quality of health facilities and services—nursing homes and halfway houses, visiting nurses and homemakers—the program has particular significance for the aged and the chronically ill. All too often such "patients" must remain in a hospital or institution whose intensive services they do not need, which they cannot afford, and where they take up room needed by others, only because they have no other place or way to obtain the simple services they do require.

The new community services program cannot, of course, suddenly put an end to such problems but it can stimulate a real examination and attack, community by community and State by State. It can result in better care for more people and serve the additional purpose of freeing needed hospital beds for the acutely ill.

★ Environmental health problems—particularly the dangers of water and air pollution—came under stepped-up attack in coordinated programs covering whole regions and industries.

Under the new water pollution act signed by President Kennedy in July 1961, the most far-reaching approach in history is being made to stream pollution abatement. The new law strengthens the long existing Federal-State partnership making it possible for communities to receive greater Federal aid in building waste-treatment works and—because of an extension of Federal enforcement powers—affording them an opportunity for more effective action to control pollution reaching their community from upstream neighbors.

Regional research facilities are being established in recognition of the fact that, although water pollution is a national problem, its specifics differ greatly from one part of the country to another and require different scientific knowledge and engineering application.

The concept of air as a limited resource is vital. As air pollution threatens 90 percent of our urban communities, the Department is seeking wider application of all known methods of control and additional research into better methods and instruments for abating it. Negotiations with the automotive industry in 1961 resulted in an agreement for factory installation in all new automobiles, beginning with 1963 models, of a device to reduce the amount of motor fumes released into the atmosphere.

★ In education—although the major fight for Federal aid is still to be won—there was a new concentration on the search for excellence at all levels, elementary through college, and in vocational as well as academic instruction.

Two-year extensions of the National Defense Education Act and of aid to federally impacted areas were enacted by Congress.

In vocational education, a special panel of outstanding men and women was appointed to work with the Department in an effort to update the character and quality of this field of education. As the country moves into an age of advanced technology and increased industrialization and automation its young people must be prepared and its manpower needs must be satisfied.

★ For the first time since the depression days of the thirties, a re-examination of the policies and structure of public welfare has been made, focused upon the causes of dependency rather than on its symptoms.

Ten administrative changes were made in the Department's public welfare program in December 1961 to provide a substantial start toward a reorientation of the Federal-State public assistance program. Emphasis will be upon the rehabilitation and restoration to self-support of persons on public assistance wherever possible. For

those who will continue to need assistance, an approach more realistic and less restrictive than the present categorical division of aid will be sought. Family services will be added to money aid. Incentives will be provided for young people receiving aid as dependent children to help secure their own future through earnings without jeopardizing necessary current assistance to their families.

Indicative of this new focus, the Bureau of Public Assistance has been renamed the Bureau of Family Services. Within the Bureau a new major unit, the Division of Welfare Services, has been established to give special attention to States' activities designed to reduce dependency, provide family counseling and services, and remove any abuses of trust which may exist on assistance rolls.

★ For the first time since the public assistance program began a quarter of a century ago, the Federal Government provided aid to dependent children whose parents are the victims of unemployment.

This is a significant breakthrough in the welfare field. Proposals in one form or another to fill this gap in public assistance coverage have been before Congress for the past 10 years. The new law is effective only until July 1, 1962, but it is hoped that before that time the general revision of welfare programs will provide for continuing assistance to such families.

★ A number of strengthening social security measures filled gaps in the old-age, survivors, and disability insurance program.

Requirements for insurance benefit eligibility were relaxed, making it possible for approximately 160,000 previously ineligible persons to qualify for benefits in the first 12 months following passage of the legislation. The retirement age for men was lowered from 65 to 62. Minimum insurance benefits paid to retired workers and to aged widows were increased. Additional incentive was provided for retired workers to increase their own earnings on jobs, without losing so much of their social security payments.

★ A more comprehensive approach to juvenile delinquency has been made possible by new legislation in which the Congress gives recognition to the national nature of the problem.

The Department is seeking cooperation not only from law-enforcement agencies but also from citizens and organizations in the communities who can give employment or encourage further schooling—the real preventives in this area of waste and tragedy. Demonstration projects designed to show how communities can take coordinated and effective action to aid youth are being supported. Funds are being provided to train additional personnel in this field.

★ For the aging, the Department has moved with enterprise and dispatch, acting as spokesman and advocate of the interests of elderly persons wherever support is needed or possible—in health, in employment opportunities, in education, and in welfare.

In seeking employment opportunities, the interest of the Peace Corps has been enlisted in balancing some of its youth with the experience and maturity of older men and women, particularly in the teaching field.

In welfare, preparation of a series of "case histories" of successful community projects and social services for the aging was begun for distribution as a guide for other communities. Social services are being sought for those elderly persons able to pay for them as well as for those in financial need.

Interagency cooperation has offered unexpected opportunities and advances. For example, the Housing and Home Finance Agency, constructing and financing housing for the aged, ran into problems of management concerned with the social and welfare needs of its tenants. The Agency sought help from the Department, and the Department is now helping to train project managers for such housing developments.

★ A new concentration in vocational rehabilitation on fundamental aspects of disability and rehabilitation can be reported.

The Department's program includes psychological aspects of disability, the attitudes of communities toward disabled people and those of employers toward hiring them, the adaptation of electronics and powered devices to artificial limbs and sensory aids, special rehabilitation needs of older disabled persons, disabled mothers with dependent children, and severely disabled persons whose rehabilitation may be beyond the means or facilities of their State agencies.

★ Strengthened regulations will permit the Food and Drug Administration to provide more complete protection to the public against hazards of unsafe foods and drugs and the economic losses occasioned by quack remedies, false labeling, and deceptive packaging.

Regulations have been issued requiring that labeling and promotional literature accompanying new drugs will provide the physician with full information about the hazards as well as the potential benefits of the drugs. Preliminary work is underway to establish a badly needed national repository of drug-reaction information.

The new Hazardous Substances Labeling Act requires safety information in the labeling of chemical products used in the home.

A Special Program for Survival

The same coordination of many parts and many activities of the Department, and the same communitywide focus in planning which we seek in our programs concerned with everyday, normal events, are also valuable to us in planning to meet that most abnormal eventuality—a thermonuclear attack upon this country.

Every discussion of both the possibility of such an attack and the advisability of having fallout shelters comes around eventually to a third point. If we survive the attack, how do we go about the daily business of living when we come out of our shelters? To a certain extent the answer to that question must come from the Department of Health, Education, and Welfare, and the Department has been moving in the past months to provide it.

The Department's Bureau of Family Services and Children's Bureau have been developing guidance materials for the States on emergency feeding, emergency lodging, emergency clothing, emergency registration and inquiry (designed to locate separated members of families), and emergency social services, including financial assistance. These services would be required in postattack situations wherever there are persons in need. At the end of the fiscal year, the first of the emergency welfare publications was being reviewed by the 50 State welfare departments. Since then, three additional volumes have been completed—as review and working drafts—and two more are now in process.

The Department's Division of Health Mobilization has stockpiled 1,930 complete emergency hospitals and \$200 million worth of medical supplies and equipment, ranging from bandages to blood derivatives and surgical instruments, throughout the country. It has, within the past fiscal year, completed a publication, "Family Guide—Emergency Health Care," designed to tell all citizens clearly and simply how to care for themselves and their families in fallout shelters or in emergency situations beyond the reach of medical help. A complete course has been prepared for use in training American families in the basic principles of medical self-help.

These health and welfare publications are guidelines to survival, concerned with the basic and essential minimums—trying hard to assay realistically what it would be like and how such new problems could be met. The programs they suggest will require the cooperation of all levels of government and of private organizations and individuals.

Today: The National Situation

As we put our first months behind us, what is the national situation in health, education, and welfare? What do we see from our national vantage point?

Health

The American people are—in general—in good health, but to maintain and raise this level of health we need more doctors, nurses, hospital facilities, community health services.

We are in some difficulty at both extremes of life. The United States has slipped to 10th place among nations in prevention of infant mortality. And for all our good start in many important things necessary to the health progress of the American people, we are still sadly lacking an effective method by which older people can purchase essential health care.

We know more than we ever have about the nature of disease and how to save lives. Many of the old scourges have been defeated or controlled throughout the Nation, but new dangers, such as accidents and environmental pollution, have been spawned by our urban industrial civilization.

In medical research, we are on the brink of important discoveries in cancer, respiratory diseases, mental illness. Yet we have not been able to apply, as widely as we should, many long-known and thoroughly proved results of earlier research.

Dramatic results have been reported during the year in the use of cancer chemotherapy in the treatment of certain types of malignancies. New therapies in mental illness continue to reduce the number of patients in public mental hospitals. Demonstration projects show that the majority of stroke patients can be restored to self-care. Thirty-five to 40 percent of all known diabetics now safely substitute oral medication for the tyranny of the daily insulin injection.

Yet against these research advances we must place certain gaps in the Nation's use of its medical knowledge. In the seventh year of the effective Salk vaccine, nearly 80 million people under 40 still have not completed the recommended course of injections. Every year nearly 13,000 die of cervical cancer, a disease which can almost infallibly be detected in its curable stages by a simple test. Twenty thousand American lives are taken each year by rheumatic fever and rheumatic heart disease—a disease caused by a chain reaction which can be broken at the beginning and in the middle. Many are blind whose sight could have been saved.

It is not enough to discover and develop through research new remedies unless they can be brought within the reach of the people—all the people.

If false remedies and quack devices reach the market, the ends of research and legitimate medicine are defeated.

In rehabilitation, we are moving into a period of fulfillment. In 1962, after more than 40 years of growth, the public program of vocational rehabilitation will reach a significant milestone—the rehabilitation of more than 100,000 disabled people in a single year.

Voluntary rehabilitation agencies are growing in size and effectiveness. Dozens of new rehabilitation centers and sheltered workshops are now in operation.

New legislation will make possible help in training teachers of the deaf and in providing more funds for the work of the American Printing House for the Blind so that blind children may have the Braille books and other educational supplies they need.

Although a number of projects designed to aid the mentally retarded are in operation, we still need to do more and to know more about what can be done to help in this special field.

Education

In education, ours is a time of reckoning. We have suddenly been brought up short and made to realize that we have actually been losing a race, not just against Russia but against ourselves. It has been shocking to wake to the fact that having our hearts in the right place and meaning well will not automatically keep us champion.

A first look is perhaps deceiving. We have more boys and girls in school than ever before—and more go on to college than ever before in any country. More go beyond a first degree to graduate study. We expect to have 7 million students in our colleges in 1970. We have fine educational institutions, many dedicated educators, and at least a vocal commitment to education by the great majority of our citizenry. New classrooms have been built, new teachers have entered the profession—but not enough of either.

There is no guarantee that all our bright boys and girls will be able to get inside the doors when they come in 1970, or that, if they do, they will find the trained teachers they need waiting to receive them.

And in spite of the zooming enrollment figures, we lose many of our finest students before college because of lack of funds or motivation to continue their schooling. We are losing also the potential talents of thousands of boys and girls, some to delinquency, because we do not have the kind of vocational education to equip them to compete in the marketplace.

We have an appalling record of school dropouts in every State. Of the 10,800,000 students enrolled in high school grades 9 through 12 in the Nation's public and nonpublic schools in 1961-62, 2½ million will drop out before graduation. This is a tragic way to prevent further crowding of classrooms.

There are not enough teachers today to teach our children in the first grades, the high schools, or in the universities. But even more serious is the fact that many of those we do have are not properly qualified. It is this quality of teaching that is our basic educational problem. It has much to do with the dropouts and with the lack of motivation for going on to college. It has much to do with the deficiencies which even earnest and talented students take with them to

higher grades and into professions and careers. It is the good teacher who catches a child up in the excitement of learning, who makes the borderline case a student, who inspires the talented and creative to work against all odds to become "educated." We do not have enough good teachers.

It is not wholly a matter of inadequate salaries that has affected the quality of our teaching, though this has certainly been one cause of failure to attract outstanding students to the teaching profession or to hold them in it. We have—under pressure of need for numbers—failed to set and maintain high enough standards for teachers—both for entrance to the profession and in classroom performance. Nor have we been effective everywhere in teaching teachers how to teach.

It is easy to say we need better education. It is harder to decide what better education is—how we get it—what should be spent in dollars, in hours, in creativity, and effort to get it. It is apparently hard for even the educational community to make a commitment to education as a whole. The institutions of higher learning are not really much interested in the problems of the elementary and secondary schools, although that is where their students come from. The academic specialists do not concern themselves with the needs of vocational schools, although both are necessary for a balanced community.

Many who oppose Federal aid for *all* schools as Federal control support Federal aid for the schools of their own districts—the so-called federally impacted areas. In truth, the total Nation is impacted when it comes to education.

Welfare

In our national program of social insurance, we are doing well. Beginning its second quarter century, social security, as it is commonly known, provides a floor of economic support to 15,624,182 men, women, and children. Nine out of 10 employed persons in the Nation, and their dependents, are protected under old-age, survivors, and disability insurance. Eighty-five percent of the people now becoming 65 years of age are eligible for retirement benefits under the program, and in the future this proportion will rise to 95 percent or more. Yet a most serious gap still exists—the failure to provide health insurance for the aged under the program.

A beginning to progress against juvenile delinquency can be seen. The waste of youth, growing out of unbearable home environments and lack of community care which make crime seem a boy's or girl's best opportunity, is too expensive for the Nation to bear. The Congress has recognized it as a national problem, and forward-looking programs are getting underway.

Improvement in protection for children in adoptive situations, in the courts, in communities, and within families is enlisting, and needs, much effort.

New ideas and increasing resources are being brought to bear upon various facets of the needs of older citizens—in health, in housing, in employment, in social services. But these are only beginnings.

The speed and effectiveness with which Federal, State, and local public and voluntary welfare organizations have cooperated in aiding refugees from Cuba during the past year provide heartening proof of the ability of our welfare structure to meet serious emergency situations, yet everywhere it is undermanned and undertrained.

In the field of public assistance—"relief"—there is serious trouble. Here, the most encouraging thing to report is that a reassessment has been made, a searching look taken at the national situation and plans made for changes. It could not be otherwise. The cynicism and publicity overtones of the Newburgh "plan," the District of Columbia cut-backs in aid to large families, and other welfare "cases" all combine to endorse our belief that we have been supporting a social welfare structure in need of major revision rather than further patching.

Public assistance programs are concerned with the needs of dependent persons *not* covered under social insurance or those whose minimum needs exceed their insurance benefits. These are the needy aged, blind, and disabled, and dependent children in families broken by death, incapacity, or absence of a parent, and more recently in families hard pressed because of unemployment.

Assistance has, to date, consisted largely of pouring out money—private and public, local, State, and Federal—tremendous in total but tragically inadequate in individual cases.

The 6.2 million persons on public assistance rolls in 1961 were largely frozen there, sustained at a minimal level of decency by monthly relief payments but with little hope or opportunity for guidance or rehabilitation services which might eventually return many of them to self-support.

Social work staff—inadequate in number and training (1 caseworker with full professional training to every 23,000 public assistance recipients)—has been unable to make the home visits and provide counseling and other family services needed as much as the monthly money payments.

The new Federal-State program, proposed to the States, seeks to meet the actual needs of families—whether this means their retention on the rolls or help in getting off.

It will require a major effort in recruitment and training of professional staff. It could be greatly aided by coordination of public and private voluntary welfare agency activities within each community.

Tomorrow

This then is our national situation today, in health, in education, and in welfare. Tomorrow we must do better—each tomorrow we must do better.

The gap between acquiring knowledge and putting it into action for people must be narrowed. The Department seeks to publicize developments in medicine, in education, and in welfare. It tries to advance the use of new findings in these fields through pilot projects and demonstration programs.

It is incredible that the citizens most in need of medical care should be denied it. People 65 years of age and over have medical costs twice those of younger people, yet their annual income, on the average, is only half as large. During any year they can expect to spend between 2 and 3 times as many days in the hospital as a younger person. They need protection against the high cost of hospitalization and other health services and they want it, not as a gift but as a right earned and established during their productive years.

The program we propose is simply a means of paying for hospital costs and related health services, not a means of providing these services. It is not a program of socialized medicine but a program providing for prepayment of health costs with freedom of choice of doctor and hospital. Arrangements for paying for the services would be much the same as those now used under private hospitalization insurance plans. No other method is as feasible or as fair to everyone.

We are fully aware that virtually all responsibility for the conduct of American education rests outside the Federal Government. This is as it should be, but the Federal Government would be derelict in its duty to its citizens and to the Nation if it did not do all in its power to aid American education, which is in trouble generally. We cannot be satisfied with any educational endeavor that is not genuinely committed to the highest standards of which we are capable.

We have sought, and we will continue to seek, to strengthen our schools in facilities, curriculum, counseling, and the quality and salaries of our teachers. We will stress the arts and humanities as well as science, for both are essential.

We hope to broaden the improvement of language teaching under the National Defense Education Act by providing assistance to teachers of English as well as teachers of foreign languages. Many of our young people enter college unable to speak, write, spell, punctuate, or understand their own language properly. This failure in a single subject hampers and holds them back in all subjects.

We are interested in education of all kinds, for there must be opportunity for instruction and achievement in all fields. We hope to obtain revisions and extensions in vocational education which will

place it in proper relationship to general education and will provide the necessary flexibility to meet shifting employment patterns.

We will seek other legislation from Congress, with one of our first concerns the necessary measures to extend and complete the general reorientation of our welfare program which we have begun through administrative changes.

We are seeking congressional authority to establish a new position, that of Assistant Secretary for International Affairs, to coordinate our growing responsibilities and opportunities in the international field. The exchange of ideas, experimental methods, research findings, and personal skills between nations is beneficial to health, education, and welfare everywhere and contributes beyond its immediate results to human understanding.

The President has proposed the establishment of an Institute for Child Health and Human Development at the National Institutes of Health. The new Institute would concentrate on problems of birth defects, infant mortality, mental retardation, and maternal factors influencing child health and development. It would study the process of aging as part of the program of human development.

The Department also looks hopefully to the Congress for final passage of two bills designed to provide educational and health services to migratory workers and their children. They would make possible some lifting of the burden of neglect, ostracism, and hopelessness long suffered by these people.

We will advocate and support legislation to extend and strengthen the consumer-protection activities of the Food and Drug Administration. We will seek legislation to aid the health professions in training urgently needed manpower through construction of educational facilities and provision of scholarships and educational grants.

The expenditure of money by itself will not automatically bring progress in health research, in education, or in welfare. If it did, we could simply buy an end to cancer, to heart disease, to mental illness—indeed, to disappointments and dependency. We could purchase wisdom and security over the counter.

It is, however, the talent and quality of people, the direction, purpose, and focus of research and community projects, and the excellence of facilities that make the money count. So we will support the projects which will stimulate creativity in others, the education and training that will produce more educators and leaders, the demonstrations that will be so clear and well thought through that many can follow their paths.

We can reorient our welfare objectives, but it is the States which make the final plan and administer the program and ultimately the caseworker in the home who must find answers for the distressed.

We can sponsor educational improvements, but it is the States and the local school boards and, in the end, the teacher who make them work. We can support and prod on matters of health, but it is in the doctor's office, the research laboratory, and the home community that lives are saved and services rendered.

All citizens are needed in this new world of our time. And yet the sick man, the hopeless man is lost. The frightened or insecure man has no strength to lend his Nation. The juvenile delinquent destroys all the years of his youth which might have offered most, in time, in courage, and in daring. The neglected aged waste their bonus hours.

The Department of Health, Education, and Welfare is looking for new answers and seeking new knowledge with a particular urgency: The realization that some of the new answers and new knowledge it seeks could mean the difference between life and death for many men, women, and children; the difference between full realization of their gifts by the talented and a mere plodding existence of little interest to themselves or others; the difference between a grim waiting out of empty years by older men and women isolated in their last days and a happy, successful living of longer life in familiar and beloved surroundings.

To have value, beginnings must stretch into continuity. So, for tomorrow, we plan to continue what we have started in our search for human successes.

Table 1.—Grants to States: Total grants under all Department of Health, Education, and Welfare programs, fiscal year 1961

[On checks-issued basis]

States, Territories, and possessions	Total	Social Security Administration	Public Health Service ¹	Office of Education	Office of Vocational Rehabilitation	White House Conference on Aging	American Printing House for the Blind ²
Total.....	\$2,890,122,796	\$2,218,508,079	\$244,206,612	\$372,075,573	\$54,932,040	—\$9,508	\$410,000
Alabama.....	80,181,949	63,342,607	6,726,494	7,937,737	2,167,428	-----	7,693
Alaska.....	12,461,873	2,177,115	2,800,982	7,370,278	113,498	-----	-----
Arizona.....	27,566,565	17,649,662	2,403,688	6,995,770	513,862	-----	3,583
Arkansas.....	46,631,209	36,098,243	4,950,459	3,829,659	1,747,960	-----	4,888
California.....	314,532,595	244,798,381	11,502,139	55,260,093	2,985,542	-----	36,440
Colorado.....	49,784,413	40,630,284	2,443,570	6,015,792	690,767	-----	4,000
Connecticut.....	23,173,735	16,444,188	1,753,959	4,545,596	419,910	-----	10,082
Delaware.....	4,882,258	2,665,364	884,681	1,154,775	176,133	-----	1,305
District of Columbia.....	10,532,184	9,263,390	797,773	221,021	248,750	-----	1,250
Florida.....	74,853,263	59,064,653	5,822,137	8,135,079	1,823,606	—3,599	11,387
Georgia.....	89,711,932	69,027,133	7,788,325	10,153,324	2,731,790	-----	11,360
Hawaii.....	16,960,200	3,733,490	2,801,146	10,055,623	365,330	-----	1,611
Idaho.....	12,229,220	8,132,615	1,424,890	2,482,959	187,978	-----	778
Illinois.....	117,897,881	98,349,905	8,382,234	8,009,494	2,136,414	—14	19,858
Indiana.....	35,410,788	27,174,410	4,451,419	3,249,452	528,064	-----	7,443
Iowa.....	40,877,599	33,541,235	3,676,317	2,676,750	978,992	-----	4,305
Kansas.....	39,941,956	28,167,364	3,872,651	7,187,912	709,363	-----	4,666
Kentucky.....	60,078,589	49,575,061	6,385,085	3,474,802	638,753	-----	4,888
Louisiana.....	117,526,663	107,759,606	5,596,679	2,828,481	1,334,815	-----	7,082
Maine.....	18,629,937	14,010,042	1,239,837	3,038,766	340,348	-----	944
Maryland.....	39,437,703	19,625,134	3,806,624	15,378,851	618,179	-----	8,915
Massachusetts.....	91,836,179	76,268,236	4,761,422	9,682,464	1,105,782	-----	18,275
Michigan.....	84,752,224	68,133,709	6,252,611	8,822,904	1,524,586	-----	18,414
Minnesota.....	50,832,699	41,574,468	4,710,334	3,399,704	1,140,106	-----	8,027
Mississippi.....	53,378,331	42,451,699	5,976,238	3,695,090	1,251,383	—273	4,194
Missouri.....	102,421,196	90,435,603	5,710,314	5,419,460	848,432	—112	7,499
Montana.....	11,916,663	6,476,636	1,705,845	3,516,680	216,878	—1,504	1,528
Nebraska.....	21,157,719	13,312,540	3,085,972	4,402,395	354,396	-----	2,616
Nevada.....	6,194,453	3,038,161	1,132,335	1,941,413	82,151	—301	694
New Hampshire.....	8,108,632	4,801,418	1,346,538	1,855,087	104,561	-----	1,028
New Jersey.....	44,733,826	32,037,151	3,918,077	7,699,940	1,062,910	-----	15,748
New Mexico.....	30,346,148	18,243,213	2,746,337	9,123,015	230,556	-----	3,027
New York.....	175,305,025	143,948,724	13,694,413	13,851,347	3,769,963	-----	40,578
North Carolina.....	75,798,347	54,709,152	11,668,423	6,911,656	2,496,642	-----	12,471
North Dakota.....	11,548,866	8,051,763	1,401,229	1,754,510	340,581	—50	833
Ohio.....	111,772,798	88,955,939	9,918,069	11,511,160	1,365,594	-----	21,636
Oklahoma.....	99,507,864	83,757,740	3,608,514	10,721,173	1,417,548	-----	2,889
Oregon.....	24,849,175	19,469,234	2,678,261	2,139,283	557,351	—787	5,833
Pennsylvania.....	123,810,882	95,774,766	13,267,049	10,371,733	4,367,838	-----	29,496
Rhode Island.....	14,005,143	9,867,406	1,116,622	2,694,084	325,943	-----	1,083
South Carolina.....	34,854,198	23,238,987	5,114,728	5,327,170	1,169,256	—26	4,083
South Dakota.....	13,909,776	8,948,493	1,206,992	3,448,831	304,192	-----	1,278
Tennessee.....	59,763,588	45,047,593	8,374,836	4,692,804	1,640,366	-----	7,999
Texas.....	158,749,693	127,094,594	11,857,107	18,072,492	1,710,030	-----	15,470
Utah.....	15,695,221	10,590,887	1,955,902	2,835,649	309,999	-----	1,694
Vermont.....	7,474,725	5,821,468	1,451,330	-----	204,352	—2,842	417
Virginia.....	49,182,395	2,860,199	7,315,764	18,663,639	1,334,600	-----	8,193
Washington.....	60,024,859	45,260,646	3,157,675	10,576,918	1,021,982	-----	7,638
West Virginia.....	39,273,878	30,634,857	5,777,242	1,503,295	1,353,485	-----	4,999
Wisconsin.....	42,794,627	33,256,990	4,936,879	3,607,971	985,621	-----	7,166
Wyoming.....	5,326,786	3,222,008	691,981	1,316,429	95,785	-----	553
Canal Zone.....	28	-----	-----	-----	-----	-----	28
Guam.....	1,316,184	231,711	48,465	973,972	62,036	-----	-----
Puerto Rico.....	16,584,132	10,154,532	3,927,365	1,763,164	736,766	-----	2,305
Virgin Islands.....	1,020,365	607,694	180,571	199,678	32,422	-----	-----
Wake Island.....	105,401	-----	-----	105,401	-----	-----	-----
Undistributed.....	8,468,858	-----	-----	8,468,858	-----	-----	-----

¹ Includes permanent annual appropriation of \$10,000.² Excludes \$248,844 paid to water pollution interstate agencies.

Social Security Administration

Social Security in 1961

THE YEAR 1961 saw a new determination to move the social security programs forward in helping to build the Nation's social and economic strength.

On June 30, President Kennedy signed into law the Social Security Amendments of 1961. On that occasion the President emphasized the part that social security plays in providing for families, children and older persons in time of stress. The amendments, he noted, represent an additional step toward eliminating many of the hardships resulting from old-age, disability, or death of the family wage-earner.

Provisions of the 1961 amendments liberalizing old-age, survivors, and disability insurance will especially help some groups in the population who have the smallest incomes and other resources aside from their benefits to fall back on. Minimum benefits were raised from \$33 to \$40, aged widows' benefits were increased 10 percent, old-age benefits were made payable to men at age 62 on an actuarially reduced basis, the quarters of coverage required for insured status for people at or near retirement age were reduced, and the retirement test was liberalized.

It was expected that in the first 12 months in which the amendments were effective about 4,770,000 people would receive \$815 million in new or increased benefits. The changes will be financed by additional income from increased contribution rates.

The 1961 amendments also provided for an increase in Federal participation in public assistance payments by the States to recipients of old-age assistance, aid to the blind, and aid to the permanently and totally disabled for the period October 1, 1961, through June 30, 1962. A decrease in the need for public assistance in some instances, however, was expected to result from the more liberal old-age, survivors, and disability insurance benefits provided in the amendments and reduction of the insured-status requirement.

The Social Security Amendments of 1960, which became law shortly after the beginning of the fiscal year, reflected growing

national concern with economic problems associated with health and medical care. To provide improved protection against economic loss caused by disability, the age-50 requirement for eligibility to disability benefits under old-age, survivors, and disability insurance was eliminated. Further to assist the States in meeting the health-care costs of the needy aged, Federal sharing in State payments to suppliers of medical care to old-age assistance recipients was increased. Also a new Federal-State program of medical assistance for the aged was authorized for older people who can meet living expenses but cannot afford the medical care they need.

By the end of August 1961, 14 States had new medical assistance for the aged programs, 4 States had completed plans for new programs, and 15 States were in the process of developing program plans.

The medical assistance for the aged measure, President Kennedy declared in his February 9, 1961, health program message to Congress, recognized the problem of those needy aged requiring public assistance to meet their medical costs. But, the President indicated, the main problem—that of preventing dependency arising from the costs of health care in old age—must now be met by using the old-age, survivors, and disability insurance system, called by his task force on health and social security “the only sound and practical way of meeting the health needs of most older people.” By providing protection against the costs of medical care through the basic national system of contributory social insurance, “it will be possible for our older people to get the vital hospital services they need without exhausting their resources or turning to public assistance,” the President said.

Benefits under the health insurance program recommended by the President would be available to all persons 65 and over who are eligible for old-age, survivors, and disability insurance or railroad retirement benefits. The program would provide payment, within certain limits, for the cost of inpatient hospital care (after a deductible), skilled nursing-home care after hospitalization, hospital outpatient diagnostic services (after a deductible), and visiting-nurse and related home-health services.

Congressional hearings on the benefit, financing, and administrative features of the program worked out by the administration, which the President stressed was “a very modest proposal cut to meet absolutely essential needs,” were held after the close of the fiscal year.

The recession confronting the Nation as the new administration took office focused attention on another aspect of the economic security of the worker and his family—the protection afforded by the Federal-State unemployment insurance system. The Temporary Extended Unemployment Compensation Act, one of the first antirecession meas-

ures proposed by the administration, was passed by Congress on March 24, 1961. The law provided additional benefits up to 13 weeks for workers who exhaust their regular unemployment benefits under existing State and Federal programs after June 30, 1960, and before April 1, 1962. Up to the end of June 1961, about 1,155,000 individuals had qualified for the extended benefits.

Other administration proposals advanced as recession turned to recovery stressed the need for long-range measures to improve and strengthen the unemployment insurance system. The proposals include a permanent standby Federal program of extended benefits for technologically displaced workers, benefits equal to at least one-half of an individual's average weekly wage (subject to maximums related to statewide averages) to bring benefit levels more nearly into line with those originally intended, and extension of the system's coverage in recognition of the fact that the risk of lost wages due to unemployment is common to all wage and salary workers.

Another proposal, passed by Congress in May 1961, made new Federal funds available to States that extend their child aid programs to help needy children in families in which a parent is unemployed. Inclusion of unemployment as an eligibility factor in Federal-State aid to dependent children will work toward the Nation's goal of enabling children to grow up in normal, secure homes. It will help meet need in many families, such as those for example where the breadwinner is not covered by the unemployment insurance program or has exhausted his benefits. Temporary action was taken pending completion of study by the Administration looking toward permanent changes in present laws. The measure expires June 30, 1962. Twelve States had adopted this measure at the end of August 1961.

The amendments and proposals sketched here and detailed along with others in subsequent sections of this report were designed to put the Nation in a position to deal more effectively with longstanding or emerging problems. Recognized as still urgently needed, however, was wider application of present knowledge and development of new.

A new approach toward finding better ways to help people to help themselves by searching out the causes of dependency was made in March 1961, when the first grants under a program of cooperative research and demonstration projects were announced by the Social Security Administration. The cooperative research and demonstration grant program was authorized by Congress to add to existing knowledge or devise and evaluate new methods of applying knowledge with regard to such problems as the prevention and reduction of dependency, coordination and planning between private and public

welfare agencies, or improvement in the administration and effectiveness of programs carried on in relation to the Social Security Act. Sixteen grants totaling about \$350,000 were awarded, with the advice of an outstanding group of experts, to educational and nonprofit institutions.

The Social Security Administration also conducted an intensive review of its own research and statistical activities. As part of the review, Commissioner of Social Security William L. Mitchell invited a distinguished group of experts from the social science research community outside Government to advise him concerning the future scope and objectives of the research program. "After 25 years," Mr. Mitchell told the advisory group, "the social security programs have reached a degree of maturity, and new or unsolved social problems are pressing upon the Nation with a degree of urgency that makes it highly desirable for us to reassess our responsibilities for research and research planning."

The advisory group was in unanimous agreement that a continuing program of long-range research in addition to basic statistical activities and current program-related research is needed if the Social Security Administration is to make further significant contributions to the understanding and solution of persistent human problems and of new problems that lie ahead. The basic recommendation contained in the report of the group to the Commissioner was that the Social Security Administration "accept responsibility for carrying out, stimulating, and supporting long-range research in the broad field of human resources and social welfare."

Indicative of a widely shared, constructive concern of the American people with questions of income security, health security, and the social needs of older persons was the White House Conference on Aging. After 2 years of preparation, involving hundreds of groups throughout the Nation and probably more than a quarter-million individuals, the Conference was held January 9-12, 1961, in Washington, D.C. It was attended by 2,565 official delegates.

The purpose of the deliberations, as summarized by the Chairman of the National Advisory Committee for the Conference, was to reach agreements and make recommendations on four basic problems: (1) the older person's economic situation; (2) his health and medical problems; (3) his pattern of living; and (4) the mobilization of resources, public and private, to improve the three preceding situations.

The "pluralistic approach" to providing for the security of older persons and to the problem of financing medical care was strongly advocated by the interested delegates. It was the consensus that the proper approach to the medical care problem was through a combi-

nation of patient payments, private health insurance plans, and Federal and State government participation. One of the most specific conference developments was the majority recommendation of the income-maintenance section that the old-age, survivors, and disability insurance mechanism should be the basic means of financing health care for the aged.

At the end of fiscal year 1961, total payments under social security and related programs were made at an annual rate of more than \$31 billion. The payments represented 7.5 percent of total personal income in June, compared with 6.4 percent a year earlier. Rising old-age, survivors, and disability insurance benefits and larger unemployment insurance payments accounted for the major part of the increase.

Under old-age, survivors, and disability insurance, the number of beneficiaries in current payment status increased by 1,362,000 from June of the previous year to 15,624,000. The number of disability insurance beneficiaries and their dependents rose 376,000, the largest annual increase since disability benefits became payable in 1956, primarily because benefits were extended to disabled workers under age 50 and their dependents beginning November 1960. The number of beneficiaries 65 and over increased by 799,000 to 11,328,000. Total benefits paid out during June 1961 amounted to more than \$1 billion.

In federally aided assistance for persons 65 and over, 2.3 million were receiving old-age assistance and 46,000 received medical assistance for the aged in June 1961. Nearly 3.4 million children and their adult caretakers received aid to dependent children—including 112,000 recipients in the newly added unemployed-parent group—106,000 received aid to the blind, and 384,000 received aid to the permanently and totally disabled. In addition, more than a million persons received general assistance financed from State and local funds. Payments for all types of assistance for the month were \$337 million.

Federal grants to States for maternal and child health and welfare programs under the Social Security Act for fiscal year 1961 were \$18,113.9 million for maternal and child health services, \$19,797.4 million for crippled children's services, and \$13,613.1 million for child welfare services.

The 1960 report of Federal credit union operations noted that in 1960 Federal credit unions made 41½ million loans totaling nearly \$3 billion. During fiscal year 1961, 626 new credit unions were chartered.

The Social Security Administration had 32,100 employees on duty at the end of the fiscal year. The great majority of the employees were in district offices and other offices of the Bureau of Old-Age and Survivors Insurance.

Hearings and Appeals

Old-age, survivors, and disability insurance claimants are guaranteed the right to hearing and review. The number of hearings continued to increase in 1961.

During the fiscal year, 14,105 requests for hearings were received—a 6-percent increase over the previous year. Requests for hearings on disability cases, however, climbed 29 percent in the last 4 months of the fiscal year. The increase was attributable in large part to the Social Security Amendments of 1960. The upward trend was expected to continue since the full impact of the amendments had not yet been realized.

Because of the accelerated tempo of requests for hearings, 17 percent more cases were pending on July 1, 1961, than on that date a year earlier. Thirty-four hearing examiners were added to the Office of Hearings and Appeals staff to handle the increased workload.

Requests for Appeals Council review of hearing examiners' decisions declined from 7,300 in fiscal year 1960 to 5,210 in fiscal year 1961. The number of cases pending at the end of the year was reduced 36 percent. However, the impact on the council's workload of the upward trend in hearings was anticipated for early fiscal year 1962.

The Appeals Council issued decisions on 224 cases remanded by the courts. Although 163 new cases were remanded during the year, the number of cases pending was reduced from 219 to 158.

A substantive survey of the operations of the Office of Hearings and Appeals was conducted by private legal consultants at the request of the Department. The purpose of the survey was to assure that the administrative processes of the office provide fair and impartial hearings.

International Activities

The Social Security Administration International Service planned training programs or conducted training sessions for 932 persons from 81 countries during fiscal year 1961. Requests for the training came through the International Cooperation Administration, the United Nations, the World Health Organization, the Organization of American States, numerous embassies, and a variety of voluntary agencies, foundations, and universities. Referrals of foreign leaders and specialists through the Department of State continued to increase with the growth of the cultural exchange program and its extension to newly developing countries.

Of the nations represented by the trainees, 21 were Asian or Middle Eastern countries, 15 were African, 19 were European, and 19 were

Latin American. Six—all newly developing countries—were represented for the first time: Afghanistan, Cyprus, Nepal, Nigeria, Senegal, and Somalia. The Palau Islands of the Trust Territory were also represented.

In addition to training, the Social Security Administration engaged in a broad spectrum of international cooperative activity related to its fields of interest. The Commissioner participated in the Eleventh Meeting of the Bureau Executive Committee of the International Social Security Association in Leningrad, and other officials represented the Social Security Administration at the association's working group meeting on old-age insurance and on the American Regional Committee of Social Security Actuaries and Statisticians. The Tenth Session of the International Conference of Social Work in Rome, in which Social Security Administration officials also participated, attracted social workers from 60 countries, many from the newly independent nations in Africa attending for the first time.

Cooperation with the Department of State in connection with sessions of the United Nations Economic and Social Council, the Social Commission, and UNICEF contributed to increased recognition for social development in United Nations' programs. Emphasis on social development in the new Act of Bogota program was a basis for increased cooperation with the Organization of American States. A recommendation of the Social Security Administration was influential in the creation of a separate department of social affairs within the organization.

The Social Security Administration also carried on a number of activities in connection with the International Labor Organization, including furnishing advisors to U.S. delegations to conferences in Buenos Aires and Geneva. The Division of Program Research continued to participate, on behalf of the Department, in the regular work of the Interdepartmental Committee on International Labor Policy.

Cooperation with voluntary agencies interested in international social welfare included participation in the National Social Welfare Assembly's Washington workshop on international affairs and in the session of the International Committee of the Council of Social Work Education in New York. A consultant served with the Committee on International Social Welfare of the National Association of Social Workers.

As in past years, the Social Security Administration cooperated with the International Cooperation Administration in recruiting social welfare and maternal and child health experts. Twelve experts were assigned to ICA overseas missions for some period during the year. The experts served in seven countries.

The Social Security Administration undertook to advance a cooperative research program on social welfare questions through a re-

quest for foreign currency under the activities authorized by the Agricultural Trade Development and Assistance Act of 1954, as amended. Funds were requested for fiscal year 1962 in seven countries. The studies proposed encompass such questions as urban social problems, social services and social security, medical care for the aged, juvenile delinquency, community development, and training of social welfare personnel.

Old-Age, Survivors, and Disability Insurance

The old-age, survivors, and disability insurance program provides continuing income for workers and their families as a partial replacement of earnings lost when the family earner retires in old age, becomes permanently and totally disabled, or dies. It does this in a way that enhances the dignity of the individual, fosters self-reliance, and helps to prevent dependency.

The program is supported by the contributions of covered workers and their employers and covered self-employed people. Benefits are earned through work and are related to past earnings. Payments under the program serve as a base to which the individual may add savings and income from private insurance, private pension plans, and other sources. Thus the worker is encouraged to supplement the basic protection afforded by his social insurance benefit with whatever additional protection he can afford to buy.

In the 26 years since the original Social Security Act was enacted the old-age, survivors, and disability insurance program has become firmly established as by far the largest program for assuring income to individuals and families who suffer a loss of earnings when the worker retires, becomes disabled, or dies. More than 9 out of 10 mothers and children are protected against the loss of income resulting from the death of the family breadwinner. Nearly 86 million people in the Nation have worked long enough to be insured for retirement and survivors benefits under the program; more than half of these have worked long enough to meet the requirements for disability protection and this number will increase rapidly each year. Eighty-five percent of the people now becoming 65 are eligible for retirement benefits and in the future this proportion will rise to 95 percent or more. At the end of June 1961, benefit checks were being sent out each month to over 15.6 million beneficiaries.

It is clear that the program as now constituted is playing a major role in assuring that people who have been self-supporting during

their working years will be able to remain independent when they no longer have income from work. Nevertheless there are gaps in the protection afforded by the program that need attention.

Health insurance for older people would fill the most serious of these gaps. The benefits provided under old-age, survivors, and disability insurance, even when supplemented by other income and savings, do not and cannot afford protection against the large and unpredictable costs of major illness for most people. The high health costs and low incomes of the aged as a group preclude a satisfactory solution of the problem through private insurance, and the Nation has long since decided to use social insurance as the basic approach in meeting economic problems that affect the majority of the people. The President has proposed that the social insurance method be used to help finance the health needs of the aged. Providing health insurance for the aged under old-age, survivors, and disability insurance would enable people to contribute during their working years toward protection against certain major health costs in old age, just as they now build protection against other major risks.

Another area that will need attention is how to keep the benefit structure in line with changes in the economy. Most people now coming on the benefit rolls have their benefit amounts based on recent years of work. Over the long run, though, under present law, benefit amounts will be based on a lifetime average of the person's earnings in covered work. If there is no provision for benefit change as earnings go up, the average earnings on which benefit amounts are based will more and more reflect the lower wages paid a person in his earlier years of work. Even if the benefit structure were changed so that a benefit was up-to-date when it was first awarded, there would still be a need to revise benefit levels periodically so that beneficiaries can share in the higher levels of living that active workers enjoy.

Basic to any consideration of the problem of keeping the program in line with the changing economy is the matter of adjusting the ceiling on the amount of earnings that can be taxed and credited toward benefits. Adjustments in the earnings ceiling to correspond with rises in earnings are important from the standpoint not only of keeping benefits up to date but also of keeping the financial base of the program from shrinking.

While the program now affords effective protection for workers of all ages and their families against the risk of severe, long-term disability, there is still a significant gap in this protection. Under present law, a worker who has been totally disabled throughout an extended period of time is not eligible for benefits unless his condition will be of long-continued and indefinite duration. Disabled workers and their families however have great need for benefit income during an extended period of total disability even though the worker may be

expected to recover, and they should be afforded protection under the program.

Increasing attention should be given to the vocational rehabilitation of disabled beneficiaries. The restoration of such beneficiaries to productive work is clearly in the best interest of the individual and the economy, and results in savings to the social security trust funds. To this end, legislation should be enacted to permit limited expenditures from the trust funds to reimburse the States for rehabilitation services for disabled beneficiaries. Making available a certain amount of full Federal financing for rehabilitation of social security disability beneficiaries would encourage the States to extend services to a greater number of such beneficiaries than is practicable under the financial limitations of the present matching fund programs, with consequent advantage to the beneficiaries and little if any cost to the social security trust funds.

Another gap in the protection of the program occurs because there is no provision in present law for the payment of benefits to a child who is dependent on a worker who is not the child's parent. As a result there are cases where a child who has been living with and being supported by an insured worker cannot get benefits on the worker's record when deprived of his support as a result of the worker's retirement, disability or death. Consideration will need to be given to the possibility of paying child's insurance benefits to a dependent child based on the earnings record of the worker who supported him even though the parent-child relationship now required by law does not exist.

The coverage of the old-age, survivors, and disability insurance program, broad as it is, still leaves unprotected some gainfully employed people and their families. Extension of coverage under the program to essentially everyone employed would provide assurance to all workers that the protection of the program would follow them from one job to another. Especially important is the extension of coverage to the approximately 2 million civilian employees of the Federal Government who are under staff retirement plans—the largest group still lacking social security protection. This protection can be provided without undue cost to employees or the Government, in a way that assures that every employee affected will have combined protection under social security and a staff retirement system that is at least as good as—and, in most instances, much better than—his present protection under only a staff retirement system. The independence of the staff retirement systems need in no way be impaired. The plan could also provide that present employees would have the opportunity to choose to continue their existing coverage under a staff retirement system without change, or to come under social security coverage and adjusted staff retirement provisions.

A large group of workers whose employment is covered under the program nevertheless has inadequate protection under the program because a large part of their earnings is in the form of tips, which are not counted as wages for social security purposes. Because much of their income is not counted their benefits have little relation to their true level of earnings. The Department of Health, Education, and Welfare and the Department of the Treasury have recommended to the Congress that tips received by an employee in the course of his employment for an employer be treated like wages paid directly by the employer insofar as possible and have suggested a plan for securing reports and collecting taxes on tips.

The old-age, survivors, and disability insurance program has now become firmly established as the basic program in the Nation for protecting American families against economic dependency arising from loss of income as a result of retirement in old-age, disability, or death of the family breadwinner. The past year brought unusually heavy legislative activity. Enactment of the Social Security Amendments of 1960 at the beginning of the fiscal year and the 1961 amendments at the end of the year resulted in needed improvements in the program, broadening its scope and increasing its effectiveness and flexibility.

The Bureau of Old-Age and Survivors Insurance moved ahead during the year to put into effect the new provisions of the 1960 amendments as well as changes which studies have indicated will improve its administrative effectiveness, while maintaining a high quality of service to the public. Meantime, the Bureau is continuing to study and evaluate the program and its administration.

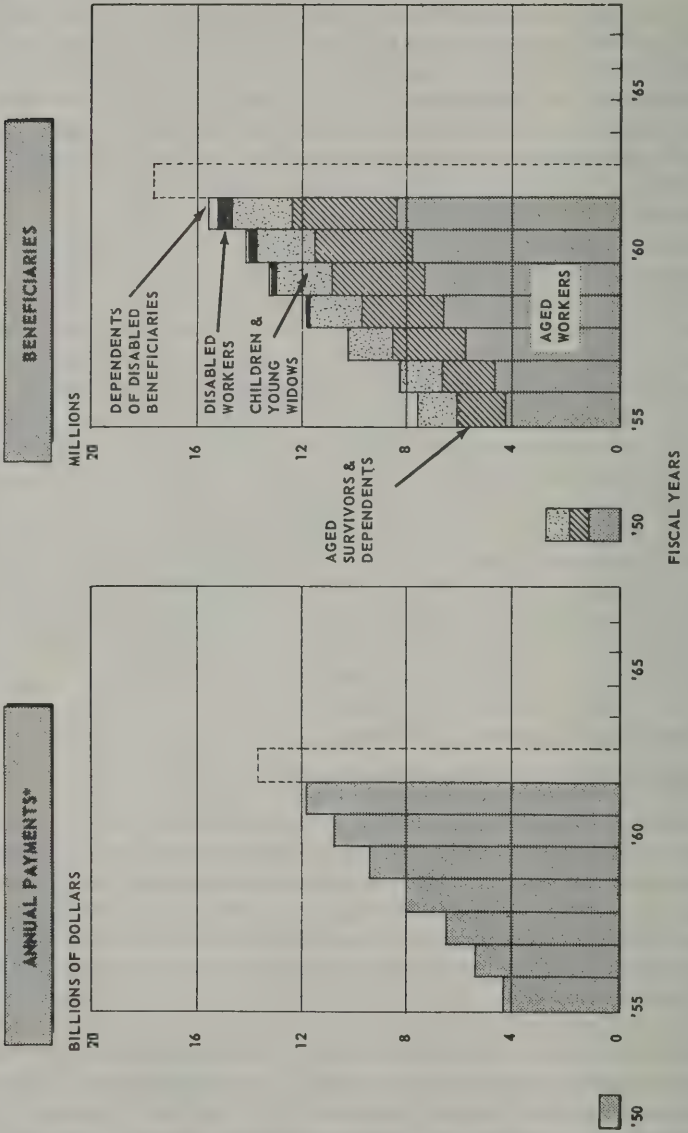
What the Program Is Doing

BENEFICIARIES AND BENEFIT AMOUNTS

Old-age, survivors, and disability insurance benefit payments in the fiscal year ended June 30, 1961, totaled \$11,889 million, 10 percent more than the amount paid during the preceding fiscal year. Benefit payments under the disability insurance part of the program were one-third larger than in fiscal year 1959-60 and totaled \$704 million. Old-age and survivors insurance monthly benefits rose 9 percent to \$11,018 million and lump-sum death payments amounted to \$167 million, about \$1 million higher.

The number and amount of monthly benefits in current-payment status increased sharply. In June 1961, 15.6 million beneficiaries were receiving benefits at a monthly rate of \$992.0 million—increases from June 1960 of 1.4 million in number of beneficiaries and \$102.2 million in amount of monthly benefits. The increase in number was 10 per-

CHART 1.—OLD-AGE, SURVIVORS, AND DISABILITY INSURANCE BENEFIT PAYMENTS AND BENEFICIARIES



cent, and the rise in the monthly amount almost 12 percent. The increase in the monthly rate resulted from (1) the growth in the total number of beneficiaries, (2) the rising proportion of benefits based on recent higher earnings with as many as 5 years of lowest earnings and periods of total disability omitted from the benefit calculation, and (3) the 1960 legislation increasing the benefit for each child of a deceased worker to three-fourths of the primary insurance amount.

Men aged 65 or over and women aged 62 or over made up 12.3 million (79 percent) of the beneficiaries—8.4 million of them were retired workers and 3.9 million were the wives and dependent husbands of retired or disabled workers and the widows, dependent widowers, and dependent parents of workers who had died. Of the remaining 3.3 million (21 percent), 2.1 million were children, about 616,000 were mothers, and 558,000 were disabled workers under age 65.

About 2.6 million monthly benefits were awarded in fiscal year 1961, 364,000 more than the number awarded in the preceding year. A record number of 540,000 monthly benefits were awarded to disabled workers under age 65 and their wives, husbands, and children. About 121,000 of these benefits were awarded to disabled workers under age 50 (first eligible in November 1960) and about 137,000 to their dependents. New highs were also reached for mother's benefits (96,000) and for benefits awarded to children of deceased or retired workers (331,000). About 122,000 monthly benefits attributable to the liberalized insured-status provision in the 1960 amendments were included in the year's awards. Old-age (retired-worker) benefits accounted for about three-fourths of the awards under this provision; the average monthly amount was \$39.35 compared with \$83.85 for awards under the earlier provision.

Lump-sum death payments during fiscal year 1961 numbered 825,000, about 5,000 more than the previous high established in fiscal year 1960; this was the 11th consecutive year in which a new record for lump-sum awards was set. About 794,000 deceased workers were represented in these awards. The average lump-sum amount per worker was \$210.36, about the same as in the preceding year.

In June 1961, the average old-age insurance benefit paid to a retired worker who had no dependents also receiving benefits was \$70.40 a month. When the worker and his wife both received benefits, the average family benefit was \$124.90. Families consisting of a widowed mother and two children received on the average \$190.70. Among beneficiaries on the rolls at the end of June 1961 whose benefits are based on earnings after 1950 the average for a retired worker with no dependents receiving benefits was about \$78.90, for an aged couple about \$133.90, and for a widowed mother and two children about \$214.20.

DISABILITY PROVISIONS

During the fiscal year, a period of disability was established for about 220,000 workers, 30,000 more than in the preceding fiscal year and about 13,000 more than the previous record number in 1957-58. About 22,000 disabled persons aged 18 or over who had applied for child's monthly benefits were found to have a disability that began before they had reached age 18; the number was about 6,000 smaller than in 1959-60. Since the beginning of the program in 1955, about 1,185,000 workers and dependent children have been found to be severely disabled and to meet the other requirements for a period of disability.

The number of disabled workers receiving monthly benefits rose 50 percent in the fiscal year and totaled 558,000 at the end of June. About 340,000 benefits were being paid to the wives, husbands, and children of these beneficiaries—a 125 percent increase. (As mentioned earlier, benefits were first payable to disabled workers under age 50 and their dependents for November 1960.) By the end of June 1961 child's monthly benefits were being paid at a monthly rate of \$5.0 million to 113,000 disabled persons aged 18 or over—dependent sons and daughters of deceased, disabled, or retired insured workers—whose disability began before age 18. About 15,000 women—who would not otherwise be eligible for benefits—were receiving wife's or mother's benefits as the mothers of disabled persons receiving child's benefits.

During the fiscal year, there has been a growing volume of litigation in connection with the disability program, with a resulting troublesome proportion of reversed decisions. The Bureau is studying the situation carefully in the hope that with improved procedures, both the volume of litigation and the number of reversals may be decreased.

By the end of 1960, the latest date for which this information is available, about 94,800 persons were receiving old-age benefits increased by an average \$8.40 a month because their social security records were frozen for periods while they were disabled before reaching retirement age. About 32,800 wives, husbands, and children of retired workers and about 45,300 widows, widowers, children, and parents of workers who had their social security records frozen before death were also receiving larger monthly benefits because of the freeze. For the same reason, lump-sum death payments in 1960 based on the earnings records of 18,850 deceased workers were increased by an average of \$23.36 per worker.

THE PROTECTION PROVIDED

Of the population under age 65, an estimated 77 million were insured at the beginning of the calendar year 1961. Some 38 million of these people were permanently insured—that is, whether or not they continue to work in covered jobs, they will be eligible for benefits when they reach retirement age, and their families are protected if they die. (Included in this total were about 900,000 women aged 62–64 who were already eligible for old-age benefits but on a reduced basis.) The remaining 39 million were insured but must continue in covered work for an additional period to be insured permanently. If the father should die, the mother and young children in 9 out of 10 families in the Nation can count on receiving monthly survivors insurance benefits. An estimated 48 million of the insured persons under age 65 also met the insured status requirements for protection against the risk of long-term and severe disability.

Of the 17.0 million people aged 65 or over in the United States at the beginning of 1961, 73 percent were eligible for benefits under the program. Sixty-four percent were actually receiving benefits, and 9 percent were not receiving benefits because they or their husbands were receiving substantial income from work. Taking into account the liberalization in the requirement for fully insured status provided by the 1961 amendments, the percentage of aged persons who will be eligible for benefits at the beginning of 1962 is estimated to be 76. This percentage is expected to rise to 83 by the beginning of 1966.

THE COVERAGE OF THE PROGRAM

An estimated 73 million persons worked under old-age, survivors, and disability insurance during the calendar year 1960. In addition, about 1 million persons employed in the railroad industry had, in effect, joint coverage under the railroad retirement and old-age, survivors, and disability insurance programs. Altogether, including employees of State and local governments and nonprofit organizations for whom coverage is available on a group-election basis and members of the Armed Forces, nine-tenths of all persons in paid employment in the United States were covered or eligible for coverage under the program.

Of workers not covered and not eligible for coverage during a typical week, about one-third were covered by Federal, State, or local retirement systems. The remaining two-thirds—7 percent of the Nation's paid employment—consisted generally of persons who are not regular workers and are for the most part self-employed persons and domestic and farm workers who did not meet certain requirements of the law as to the amount of their earnings or the length of time worked.

INCOME AND DISBURSEMENTS

Expenditures from the Federal Old-Age and Survivors Insurance Trust Fund during the fiscal year totaled \$11,743 million, of which \$11,185 million was for benefit payments, \$322 million for transfers to the railroad retirement account and \$236 million, including Treasury Department costs, for administrative expenses. Total receipts were \$11,814 million including \$11,293 million in net contributions and \$522 million in interest on investments. Receipts exceeded disbursements by \$72 million, the amount of the increase in the trust fund during the year. At the end of June 1961 this fund totaled \$20.9 billion.

Total assets of the old-age and survivors insurance trust fund, except for \$1,377 million held in cash, were invested in United States Government securities as required by law; \$3.4 billion were invested in public issues (identical to Treasury securities owned by private investors), and \$16.2 billion were invested in securities of varying maturities issued for purchase by the trust fund. The average interest rate, figured on the coupon rate and face amount of all investments of this fund at the end of the fiscal year, was 2.74 percent.

Expenditures from the Federal Disability Insurance Trust Fund during fiscal year 1961 totaled \$745 million, of which \$704 million was for benefit payments, \$5 million for transfers to the railroad retirement account, and the remainder—some \$36 million—for administrative expenses. Total receipts were \$1,082 million, including \$1,022 million in net contributions and \$60 million in net interest on investments. Receipts exceeded disbursements by \$337 million, the amount of increase in the fund during the year. At the end of June 1961, the fund totaled \$2,504 million. (Contributions to this fund first became payable in January 1957 and benefit disbursements began in August of that year.)

Assets of the disability insurance trust fund consisted of \$2,386 million in United States Government securities and a cash balance of \$119 million. The invested assets consisted of \$87 million in public issues and \$2,299 million in securities of varying maturities issued for purchase by the trust fund. The average interest rate, figured on the coupon rate and face amount of all investments of this fund at the end of the fiscal year, was 2.85 percent.

Administering the Program

The Bureau entered fiscal year 1961 with normal workload backlogs, the amount of work pending at various work stations being generally no more than necessary to keep work flow current. With a relatively stable workload situation and more favorable workload-to-staff rela-

tionship than had existed for several years, the Bureau appeared to be in a good position to put into effect improvements in operations which had been successfully tested and would make for improved administration and a higher quality of public service. This highly favorable situation was altered, however, with enactment of amendments to the old-age, survivors, and disability insurance program in September 1960. Once again the Bureau was faced with a heavy influx of additional workloads and had to make preparations to recruit and train the necessary additional staff. At the same time, plans were being put into effect to proceed with further study and implementation of the long-range integrated data processing and electronic data processing programs to which the Bureau was committed. The 1960 amendment provisions which resulted in immediate, substantial workload increases were those which changed the retirement test, eliminated the age-50 requirement for disability insurance benefits, and liberalized insured status requirements.

The additional workloads resulting from the amendments necessitated substantial staff increases and made it imperative that the Bureau recruit and train new personnel as rapidly as feasible. Additional personnel requirements were measured against expected workload increases, recruitment potential, Bureau capacity to effectively train and absorb into regular operations the added staff, and projected requirements after fiscal year 1961.

Employees on duty at the end of the fiscal year totaled 31,391. This end-of-the-year staffing total reflects not only the increase due to 1960 amendment workloads, but also normal program growth, some scheduled advanced recruitment to secure the best college graduates available, and a stepped-up recruitment activity carried out in anticipation of the latest amendments to the program enacted on June 30, 1961. In addition to the staffing indicated above, the Bureau also used 2,129 man-years of overtime during the fiscal year.

In addition to workload impacts, the 1960 amendments also presented a number of administrative problems that had to be resolved promptly, to ensure effective implementation of the changes made in the law. Priority was given to training on the amendment provisions, essential for both experienced and newly recruited personnel. The Bureau was also faced with the task of issuing and coordinating a considerable volume of instructional material and forms essential for the implementation of the amendments. Initial emphasis was given to those areas in which the amendments had immediate effect. A comprehensive informational campaign on the amendments to inform the public of the changes in the law was conducted.

A few key workload figures best illustrate the magnitude of the operating task faced by the Bureau during the year. Approximately

2,690,000 claims for old-age and survivors insurance benefits and about 935,000 for disability insurance benefits were received. New social security accounts were established for 3,451,000 persons and duplicate account number cards were issued to 3,039,000 people. Approximately 273,800,000 earnings items were received for posting to individual accounts and more than 2,650,000 requests for changes in personal record data were processed. About 2,300,000 statements of earnings accounts were issued to individuals who inquired about the status of their earnings records.

On January 1, 1961, a new Division, designated as the Division of Management, became operative. In this new organizational entity, the management functions formerly performed by the Division of Administrative Management and the Division of Public Information and Personnel Management, with the exception of the Office of Information, were consolidated. The Office of Information now reports directly to the Office of the Director.

The new Division serves as the staff arm of the Director for management analysis and appraisal, financial management, personnel management, training, employee health and communications, procurement, and general management services. Consolidation of these functions in one Division permits greater coordination of the management activities involved, places them under the control of one Assistant Director, and makes possible a unified and more effective leadership in top-level Bureau management functions.

For the past few years, the Bureau has been exploring the use of electronic equipment to handle its rapidly increasing workloads without increasing staff at a proportionate rate. By 1955, electronic equipment had been developed to the point where installations were made in the Division of Accounting Operations for the maintenance of earnings records and making initial benefit computations. Subsequently, in 1958, computers located in the Division of Accounting Operations were used to convert old-age, survivors, and disability insurance benefits to the new rates resulting from amendments to the law and, in 1959, to facilitate the recertification of benefit payments for the Baltimore Payment Center.

Based on this earlier experience with electronic computers, the Bureau launched a long-range program of developing an integrated data processing system in its claims operations to provide better service to the public through increased speed and accuracy, plus reduced costs. The broad concept envisioned a claims operation in which information and decisions would be recorded in machine language at early points in the process, transmitted automatically with maximum speed and accuracy, and translated electronically into final products. A thorough investigation of the many types of data processing equip-

ment was conducted and notable progress was achieved in the implementation of the long-range integrated data processing system. Full development is expected by 1964. During the year, computers and related equipment were put into operation at the various payment centers.

Computers were installed in the Philadelphia, Chicago, Kansas City, and Birmingham Payment Centers. Peripheral equipment was installed in the New York and San Francisco Payment Centers. The Philadelphia Payment Center provides computer service to New York, and the Kansas City Payment Center services San Francisco. The Baltimore Payment Center is serviced by the computer in the Division of Accounting Operations. During the year, the entire accounting records for the Bureau's old-age, survivors, and disability insurance beneficiary rolls, representing some 15 million items, were converted to magnetic tape.

Electronic data processing systems and programs were placed in regular operation to create media for issuing initial benefit checks, mechanically prepare award certificates, prepare checkwriting media for recurring payments, and mechanically update beneficiary records by additions, deletions, and changes of address. These techniques now make it unnecessary for the Treasury Disbursing Offices to establish and manually maintain records on new additions to the beneficiary rolls. The creation of master record tapes will permit the recording of monthly payment history. In addition, it will permit the introduction of methods for mechanically processing beneficiaries' annual reports of earnings, suspensions and reinstatements of benefits, terminations of entitlement, and change of address items.

Testing of high-speed wire communications between Kansas City and San Francisco, designed to transmit data from magnetic tape to magnetic tape, has been completed. This was a venture into a relatively uncharted area of transmitting data over telephone lines from one tape station to another tape station over 1,800 miles away. The tests were conclusively successful and the system was put into operation.

Recording on magnetic tape of payment histories for all beneficiaries was started in January 1961, and included actions taken in December 1960. All benefit actions are now added to the tape records on a daily basis through the regular daily updating operations. This provides current benefit, payee, address, and payment history data for all included beneficiaries.

At the same time that it was investigating and planning for computer applications to the claims process, the Bureau conducted a Data Transmission Pilot test in 1960. The Pilot installation, involving 26 district offices, 2 relay centers, 3 payment centers, 2 regional offices,

and the Central Office in Baltimore was observed and thoroughly tested during fiscal year 1961. Based on the results of this study, the Bureau decided to proceed with the establishment of the entire National Data Transmission System which will include all Regional and district offices, payment centers and Bureau Headquarters in Baltimore. In June 1961, contracts were let for the special equipment needed for the Baltimore Transmission Terminal, 6 Communications Control Centers, and 48 relay centers to be established as key elements in the National System. One Communications Control Center will be located in the Social Security Building in Baltimore and the others will be located in the payment centers at Chicago, Philadelphia, Birmingham, Kansas City, and San Francisco. Schedules for the orderly linking of all the Bureau's processing points during fiscal year 1962 have been drawn up and additions to the system are being made on a regular basis. Late in the fiscal year, a Telecommunications Management Branch was established in the Division of Management to provide unified control and management of the National Data Transmission System.

In connection with studies concerning the use of electronic equipment and data transmission systems, the Bureau is also studying other aspects of the claims process. For example, a contract was made with The Johns Hopkins University in Baltimore for a 3-month exploratory Operations Research Study to determine whether operations research techniques could be profitably applied to processing and organizational problems in the long-range aspect of the Bureau's work. The study, conducted by a research team from the University, was started in November 1960 and completed in February 1961. A comprehensive report of findings and recommendations was published in April and reviewed by the top staff of the Bureau to determine whether and how operations research might be used most advantageously in decision-making processes. As a result, a decision was made to develop a Bureau operations research capability. Outside professional assistance will be utilized to augment and complement available Bureau skills in the development of this program.

The Bureau continued its activity in studying proposals to provide health insurance for beneficiaries aged 65 and over. Issues and problem areas involved in the administration of such a program are being studied to permit development of possible solutions and alternative courses of action. In January 1961, a small group of Bureau personnel was detailed to study and develop plans for the administration of a health insurance program. This staff is working in coordination with other organizations within the Department of Health, Education, and Welfare and other government agencies. Discussions were also held with representatives of other national organizations in the

health field concerning various alternatives and problems presented by the proposed legislation. The large variety of complex questions and problem areas encountered by this group during its investigations in the last 6 months indicate a need to continue these studies, so that the Bureau will be properly prepared to provide advice on the administrative feasibility of proposals and to step into actual administration if health insurance for the aged is enacted.

In the last few years, the administration of the old-age, survivors, and disability insurance program in foreign countries has been the subject of considerable review and study. Surveys have been conducted in Europe and the Far East to identify problem areas and to explore ways and means of facilitating the claims process and expediting service to claimants. In fiscal year 1959, an agreement was negotiated with the Veterans Administration, whereby Veterans Administration staff and facilities in the Philippines are utilized on a reimbursable basis for services in connection with old-age, survivors and disability insurance affairs originating in that area. Another step was taken last year to accomplish additional improvements in this area of Bureau operations. A decision was reached to bring together in one central office location as many as possible of the diverse activities related to the administration of this phase of the program. In May 1961 establishment of a new Branch in the Division of Claims Control was approved to provide overall responsibility for old-age, survivors, and disability insurance program administration in foreign countries.

During the past year, the Bureau has been engaged in the process of settling down in the new Social Security Building on the outskirts of Baltimore and working out the many necessary adjustments. As of the end of the year, one unresolved problem was that of space requirements—the new building is filled to capacity and certain segments of the Bureau are still located in downtown Baltimore. A series of amendments, with the resulting growth of staff, has made it difficult to keep pace with the demands for space. Construction of an Annex to the Social Security Building to house those segments of the Bureau still downtown has proceeded according to plan. It appears that there will be no difficulty in meeting the contract completion date of June 1962 for this addition to the building. As of the end of June 1961, work was proceeding ahead of schedule.

Increasing space needs have led to a recommendation for expansion of the Annex to provide sufficient space for all of the disability and Baltimore Payment Center functions. Accordingly, an appropriation request has been submitted to Congress to obtain funds to provide additional space in the Annex.

At the end of fiscal year 1961, 30 large employers, with about 4 million employees, were either reporting employees' earnings on magnetic tape, or had plans to report by this method in the near future. There are savings to both the employers and to the Government in this system. The employer is able to eliminate the time-consuming listing of lengthy wage reports, often running as high as 1,000 pages per employer, along with the transcription errors which are costly to correct—both for the employer and for the Government. The taped wage reports, prepared automatically from the employer's payroll records, also eliminate steps in the Government's processing of the reports, such as punching cards for each employee reported.

At present, 253 employers having 10,000 or more employees are submitting reports of their employees' earnings directly to the Social Security Administration rather than through the Internal Revenue Service. The direct submittal of these reports permits the earnings records of the nearly 7 million employees affected to be processed and updated about 15 days earlier than under conventional methods. An additional 39 employers with approximately 1 million employees are considering the adoption of this plan.

During the year, the Bureau continued to work with the Internal Revenue Service to obtain more complete and accurate earnings reporting, particularly in the areas of migrant farm laborers and domestic service workers and self-employed persons and to secure more prompt processing and forwarding of earnings reports to the Bureau. As a result of the negotiations conducted during the past year, previous agreements were firmed up and agreement was reached on a program for increased Internal Revenue Service audit and compliance activities. The details of this program will be worked out in fiscal year 1962.

A significant recent accomplishment was the inauguration of a formal accounting procedure by which certain representative payees are required to submit annual reports as to the stewardship of the funds they have received on behalf of minor children and adults found to be unable to handle such funds. This development grows out of extended Bureau experience in this area. The accountability procedure augments but does not supplant personal interviews with certain representative payees at stated intervals. The significance of the annual accounting is that it requires a representative payee, under a system of administrative guardianship, to make appropriate reportings of his use of the funds received on behalf of beneficiaries in a trust relationship.

All necessary forms, internal instructions, and formal regulations have been developed, and district office personnel are now engaged in interviewing, interpreting, and implementing this procedure with

accountable payees. Further administrative refinements are contemplated, particularly in the early years of the activity when careful policy review and control will be required.

Legislative Developments During the Year

The Social Security Amendments of 1961, P.L. 87-64, mark still another step forward in providing American workers and their families with basic protection against the hardships that can result from loss of earnings when the breadwinner retires, becomes disabled or dies. This legislation was enacted June 30, 1961.

PROVISIONS OF THE 1961 AMENDMENTS

Reduction in the minimum eligibility age for retirement benefits for men.—The age at which men are first eligible for old-age and survivors insurance benefits is lowered from 65 to 62, with benefits for those who claim them before age 65 reduced to take account of the longer period over which they will get their benefits. It is estimated that benefits amounting to \$440 million will be paid during the next 12 months to about 560,000 people who would not have been eligible for insurance benefits if it were not for this change.

Under the new provision, the insurance benefits for a man worker are reduced at the same rate as now applies for a woman worker ($\frac{5}{9}$ of 1 percent for each month before age 65 for which a benefit is payable); husband's insurance benefits are reduced at the same rate as now applies to wife's insurance benefits ($\frac{25}{36}$ of a percent for each month before age 65 for which a benefit is payable); and widower's and surviving father's insurance benefits are payable in full as widow's and surviving mother's insurance benefits now are. A man who begins getting old-age insurance benefits in the month in which he reaches age 62 will get a benefit amounting to 80 percent of the amount he would get if he stopped working then but waited until his 65th birthday before applying for benefits; a man getting husband's insurance benefits at age 62 will get 75 percent of what he would have gotten at age 65.

As is now true for women, the percentage reduction in the insurance benefit payable before age 65 will continue to apply after 65, except that if the person works and earns enough before he reaches 65 to cause any of his benefits to be withheld the reduction in his benefit will be refigured at 65 to reflect the fact that benefits were not paid for as many months before 65 as was contemplated when the original computation was made.

As originally proposed, the provision to lower the minimum eligibility age for insurance benefits for men would have involved some

additional cost (estimated at 0.10 percent of payroll on a level-premium basis). This additional cost would have arisen because the computation of both fully insured status and the average monthly wage (from which benefit amounts are figured) would have been liberalized for men as they were for women when insurance benefits were made available to them at age 62. The measuring period for determining the number of quarters of coverage required to be fully insured for benefits and for determining the number of years to be included in the computation of the average monthly wage would have been based on the period ending with the beginning of the year of attainment of age 62 instead of age 65—a 3-year-shorter period than under present law. Using a smaller number of years in the computation permits the dropping of more years of low earnings and thus may have given a higher average monthly wage and a higher benefit amount even where the person works right up to age 65. In the amendments as adopted, an increase in the cost of the program is avoided by continuing to use age 65 as the ending point for determining insured status and computing the average monthly wage for a man.

Because the period for computing the average monthly wage for men extends to age 65 even though men may claim benefits before that age, in some cases where coverage was very recent as many as 3 years without earnings may have to be included in the computation. Where the man works after entitlement to reduced benefits, therefore, the new law provides for a special automatic recomputation without an application at age 65, or death before age 65, to pick up such earnings and, in death cases, to shorten the period used.

The minimum benefit increased.—The minimum insurance benefit payable to a retired insured worker who begins to get benefits at or after age 65 or to a disabled insured worker, and to the sole survivor of a deceased insured worker, is increased from \$33 to \$40 per month (the minimum primary insurance amount), with corresponding increases for people getting other types of insurance benefits—for example, wives and children—based on primary insurance amounts of less than \$40. This provision will put an additional \$170 million in the hands of 2,175,000 people in the first 12 months of its operation.

The provision for increase in minimum benefits makes an improvement in the old-age, survivors, and disability insurance program that is much needed at the present time. People coming on the benefit rolls in the future will generally get benefits above the minimum level because they will have had a chance to work in covered employment during their best working years. Right now, though, many of the people on the rolls are getting benefits at or near the minimum level not because they had a low level of lifetime earnings but because they

were already old when their jobs were covered and their earnings under the program were lower than their average earnings over their lifetime. The increase in the minimum makes the protection of the program more effective for these people.

Insured status requirements changed.—The insured status requirement—the proportion of time that a person must work under social security to be eligible for old-age, survivors, and disability insurance benefits—is changed from 1 quarter of covered work for each 3 calendar quarters elapsing after 1950 to 1 quarter for each calendar year (equivalent to 1 for each 4 calendar quarters) up to the year in which he reaches age 65 (age 62 for women). This change makes the insured status requirements for people who are now old comparable to that which will apply in the long run for people who will attain retirement age in the future. These latter will be fully insured if they are in covered work for the equivalent of 10 years out of an adult working lifetime of about 40 years.

This change will help many people who are uninsured because the work they did during their working years was not covered and by the time their jobs were covered they were already so old that they could not work regularly enough to meet the insured status requirements then in the law. About \$65 million will be paid during the first 12 months to 160,000 people who would not otherwise have qualified for insurance benefits.

The aged widow's benefit increased.—The insurance benefit payable to an aged widow of a deceased insured worker is increased by 10 percent, from 75 percent of the worker's primary insurance amount (the basic amount on which all old-age, survivors, and disability insurance benefit amounts are based) to 82½ percent. (A similar increase is made in the insurance benefit payable to a widower and to a surviving dependent parent where only one parent is entitled to benefits.) This change will result in \$105 million in additional benefits being paid to 1,525,000 older people during the first 12 months of operation.

Under the law in effect up to this time, when a man died his widow had to get along with one-half of the benefit income that the family had while the man was living. If the retirement benefit for a man bears a reasonable and adequate relationship to his previous earnings, as it is intended to, then ¾ of that benefit is not adequate for his widow in terms of the man's earnings. The increase provided in the legislation will produce a more reasonable relationship between the widow's benefit and her deceased husband's earnings.

The retirement test liberalized.—The provision for withholding benefits from beneficiaries whose earnings exceed \$1,200 a year (generally referred to as the retirement test) is changed so that \$1 in

benefits will be withheld for each \$2 of earnings between \$1,200 and \$1,700, rather than between \$1,200 and \$1,500 as under previous law. (One dollar in benefits will be withheld for each \$1 earned over \$1,700.) Expanding the area over which the \$1-for-\$2 adjustment applies means that older people have a positive incentive to increase the part-time work they do up to the \$1,700 point. There is thus a substantial improvement in the effect of the program on incentives for older people to contribute their skills and energy to the economy and to improve their own economic status through such current work as they are able to obtain and perform. Under the new test, about 350,000 people will start to get insurance benefits or will get more benefits for 1961 than they would get if the law had not been changed.

Extension of the time for filing fully retroactive applications for establishing disability periods.—The legislation extends for 1 year—through June 30, 1962—the time within which insured workers with long-standing disabilities may file applications for disability protection on the basis of which the beginning of a period of disability can be established as early as the actual onset of disablement (as far back as October 1941). Many of those benefited by this provision are persons who only recently—through the 1960 amendment that provided cash disability benefits for disabled workers under age 50—were afforded the opportunity to become eligible for monthly disability benefits. Some of these new eligibles only now are learning of their rights to disability benefits. In some instances these rights would have been lost if the time for filing fully retroactive applications had not been extended. As in the previous law, where an application is filed after the deadline (now June 30, 1962), a period of disability can be established no earlier than 18 months before the date of filing application even if the applicant stopped working because of his disability much earlier than that 18th month.

Employees of State and local governments.—The 1961 amendments afforded employees of the States and localities additional time to elect social security coverage under the provision permitting specified States to cover only those retirement system members who desire coverage, with all future members being covered compulsorily. The amendments also added New Mexico to the list of States to which the provision applies; it now applies to 17 States.

Giving survivors of certain ministers opportunity to elect coverage.—The 1961 amendments extended the provision of the 1960 amendments which permits ministers to elect coverage before April 16, 1962, to the survivors of certain ministers. Survivors of ministers (or Christian Science practitioners) who die on or after the date of enactment of the 1960 amendments (September 13, 1960) and before April 16, 1962, without having elected coverage, may file certificates of election before April 16, 1962.

Contribution rates increased.—The social security contribution rates payable by employers and employees are increased by $\frac{1}{8}$ of 1 percent each, and the contribution rate for self-employed people is increased by $\frac{3}{16}$ of 1 percent and rounded to the nearest tenth of 1 percent, beginning with 1962. In addition, the tax increase scheduled for 1969 will be moved up to 1968. Since the amendments would increase the level-premium cost of the program by 0.27 percent of payroll, and since these changes in the social security contribution rate schedule provide for additional income to the trust funds which is also estimated at 0.27 percent of payroll, the legislation does not change the actuarial balance of the insurance program and the insurance system will remain on a sound financial basis.

The changes in the contribution schedule are shown below:

Calendar years	Employers and employees, each		Self-employed	
	Old	New	Old	New
	Percent	Percent	Percent	Percent
1962.....	3	3 $\frac{1}{8}$	4 $\frac{1}{2}$	4.7
1963-65.....	3 $\frac{1}{2}$	3 $\frac{5}{8}$	5 $\frac{1}{4}$	5.4
1966-67.....	4	4 $\frac{1}{8}$	6	6.2
1968.....	4	4 $\frac{5}{8}$	6	6.9
1969 and after.....	4 $\frac{1}{2}$	4 $\frac{5}{8}$	6 $\frac{3}{4}$	6.9

Research Activities

A major survey research project conducted during the fiscal year 1961 was a survey of the characteristics and resources of 3,400 disability insurance beneficiaries and disabled persons in the eight largest metropolitan areas whose social security records were frozen to protect their benefit rights. The findings of this survey are now being tabulated. Other studies of disability beneficiaries were begun during the year, utilizing nonsurvey data; these studies concern the characteristics of persons who have been denied a period of disability, and the characteristics of disabled persons who were rehabilitated by State agencies in the 1957-58 period.

Reports were issued during the year on data collected in a 1957 survey of aged beneficiaries and mother-child groups. These reports analyzed the impact of hospitalization costs on the aged, as well as the sources of income, employment status, and living arrangements of retired beneficiaries. In the coming fiscal year, the Bureau plans to begin a study of a sample of aged beneficiaries who will be revisited over a period of years in order to determine how their situation changes as they grow older and the kind of adjustments they make to such changes.

The Bureau conducted a survey of State and local retirement systems, and began preparation of a report on the benefit-contribution

characteristics of such systems before and after old-age, survivors, and disability insurance coverage was obtained. Several pretests were made in a survey of reasons why persons apply for old-age benefits; the survey questionnaire was revised in the light of the pretest results, and plans were made for full-scale quarterly surveys in fiscal 1962.

A number of other socio-economic research studies were completed during the year, utilizing nonsurvey techniques. Reports were issued on the characteristics of persons separating and withdrawing contributions from the Federal Civil Service Retirement System; the rehabilitation implications of activity limitations among disabled workers; and the employment of women under the program.

Program Simplification

Progress continues to be made by the Bureau in its efforts to make the old-age, survivors, and disability insurance program easier to understand, accept, and administer. Many of the proposals for simplifying the program that were developed over the last few years were included in the Social Security Amendments of 1960. During the last year, the Bureau completed studies and developed recommendations for simplifying the insured status requirements for benefits and the provisions for paying reduced benefits before age 65. Some of these proposals, along with others of the same nature developed by the Chief Actuary of the Social Security Administration, were incorporated in the amendments of 1961. Further progress along these lines was made in the area of paying reduced benefits before age 65 as a result of a major redrafting effort by the Legislative Counsel's Office of the House of Representatives.

Late in fiscal 1961, the Bureau got underway a long-term simplification project to reorganize and rewrite title II of the Social Security Act. The objectives of this project are to: (1) improve the organization and format of the statute; (2) eliminate unnecessary verbiage; and (3) eliminate minor inequities and inconsistencies. Although the Bureau took the initiative in setting up this project, the new title will be prepared in cooperation with the staffs of the Legislative Counsel's Office and the Committee on Ways and Means of the House of Representatives.

Financing the Program

The old-age, survivors, and disability insurance system, as modified by P.L. 87-64, has an estimated benefit cost that is very closely in balance with contribution income. In enacting the 1961 amendments Congress again made clear its intent that the program be self-support-

ing from contributions of covered workers and employers. Careful review was given to intermediate-range and long-range actuarial cost estimates prepared for use of the congressional committees in their legislative considerations. The program as amended continues to be financed on an actuarially sound basis, both for the next 15 to 20 years and for the distant future.

The difficulties involved in making exact predictions of the actuarial status of a program that reaches into the distant future are widely recognized. If different assumptions as to, say, interest, mortality, retirement, disability, or earnings had been used, different results would have been obtained. Accordingly, no one set of estimates should be looked upon as final, in view of the fact that future experience may vary from the actuarial cost estimates. Nonetheless, the intent that the system be actuarially sound can be expressed in law by a contribution schedule that, according to the intermediate-cost schedule, results in the system being substantially in balance.

OLD-AGE AND SURVIVORS INSURANCE BENEFITS

The level-premium cost of old-age and survivors insurance benefits after 1961, on an intermediate basis, assuming interest of 3.02 percent and earnings at about the levels that prevailed during 1959, is estimated at 8.79 percent of payroll (after adjustments to allow for administrative expenses and interest earnings on the existing trust fund). The level contribution rate, equivalent to the graduated rates in the law, is estimated at 8.55 percent of payroll, leaving a small actuarial insufficiency of 0.24 percent of payroll. In view of the very long range over which these projections are made, and the many variable factors included, the insufficiency is so small that the system may be considered in actuarial balance.

DISABILITY INSURANCE BENEFITS

The Social Security Amendments of 1956 established a system for financing disability benefits which is entirely separate from the financing of old-age and survivors insurance benefits. The estimated level-premium cost of the disability benefits (adjusted to allow for administrative expenses and interest) on an intermediate basis is 0.56 percent of payroll. Contribution income has been specifically allocated to finance these benefits; this income is equivalent to 0.50 percent of payroll, leaving a small actuarial insufficiency of 0.06 percent of payroll. Future experience with this program will be studied carefully to determine whether the actuarial cost factors used are appropriate or if the financing basis needs to be modified. The use of slightly less conservative cost factors would result in cost estimates showing the disability insurance system in complete actuarial balance.

Summary and Conclusion

In the years since the adoption of the Social Security Act the American people have moved a long way toward attainment of the goal of freedom from want. Establishment of the old-age and survivors insurance program and improvements that have been made in it throughout the years have contributed in large measure to the progress that has been made. Because under this social insurance system the right to benefits is earned through work and paid for in part by contributions from the worker's earnings, the system goes hand-in-hand with our American traditions. The social insurance program that has proved so successful thus far can and should be improved so as to meet the challenge of changing conditions and applied to emerging problems, so that in the future it will continue to make a major contribution to the welfare of the American people.

Public Assistance

Public assistance, complementary to social insurance, attempts to meet minimum essential needs of individuals and families when, for various reasons, they are unable to do so themselves. It is the basic underpinning program in the social security system of the Nation, dealing with unmet individual needs that generally are not insurable because of their unpredictability, or are beyond the scope or level of benefits considered actuarially sound under social insurance.

This dual attack on unmet basic human needs—social insurance and public assistance—was born out of the stark realization that the process of industrialization and urbanization which, within less than a century, had transformed a major part of our farms and countryside into factories and cities, had also created social problems with which individuals could no longer deal within the family or local community.

Industrialization brought greater productivity, higher standards of living, better nutrition, improved medical care, and many other comforts and luxuries for those who had the money to buy them. But economic progress also brought social changes in addition to increases in population. There were disproportionate increases in the dependent age groups—the aged and children—and a shrinking proportion of wage earners to support them. Family responsibility, of necessity, also lessened as the large farm family was replaced by the smaller parent-children unit in the cities dependent largely on income from wages.

Mass unemployment in the early 1930's left millions without the means of buying the basic necessities of life. Federal governmental

aid, first designed to meet immediate emergency financial need due to unemployment, was later channeled into long-range preventive measures—social insurance against the risks of unemployment, old age, dependency of children because of the death of the wage earner, and disability. Legislative changes in the Federal old-age, survivors, and disability insurance program have extended its coverage until today 9 out of 10 persons in the working population come within this broad umbrella of economic protection.

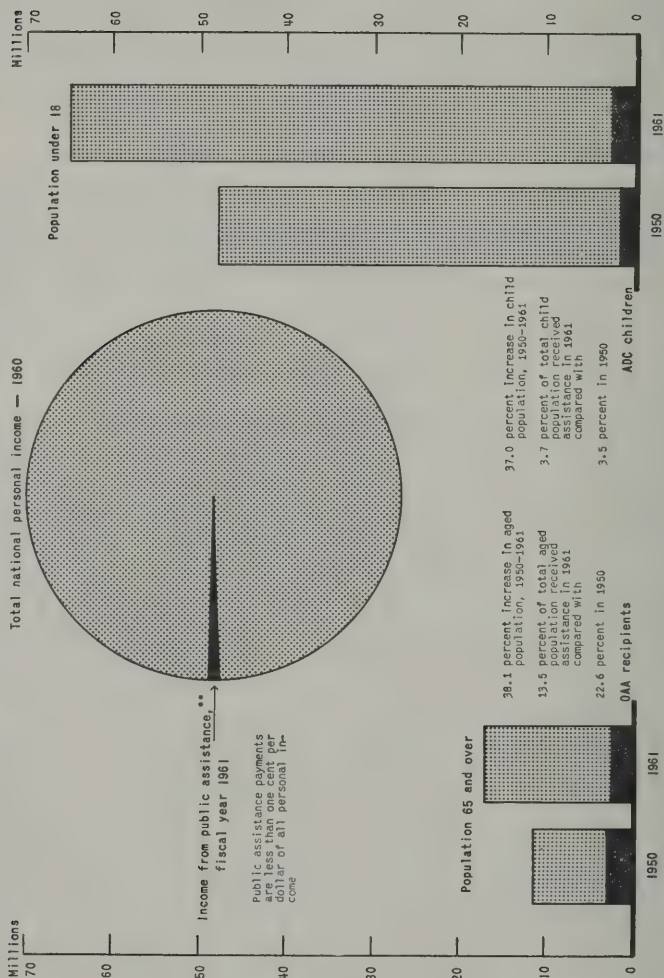
Role of PA Programs

It is with the needs of dependent persons *not* covered under social insurance or whose minimum needs exceed insurance benefits that public assistance programs are concerned. Less than 4 percent of the population received public assistance in June 1961, and despite the increased dollar cost of public assistance over the years, expenditures for this purpose in fiscal 1961 represented less than a cent per dollar of total personal income in the Nation during 1960. (See chart 2.)

Assistance to sustain and strengthen individual and family life are vital to those who need it. The provision for financial assistance, medical care, and other social services under federally aided public assistance programs available in most of the local communities of the United States has assured the minimum essentials of living to the needy aged, blind, disabled, and children in families broken by death, incapacity, or absence of a parent, and more recently, in families hard-pressed because of unemployment. (See chart 3.) It has also contributed much to strengthening family ties that might otherwise have been irreparably scarred by anxiety and poverty or broken by separation of children from their home and parents.

The basis on which Federal-State public assistance programs are administered is also significant in sustaining principles fundamental to our democracy. Initial provisions of the public assistance titles of the Social Security Act reflect respect for the dignity of the individual and recognition of his rights as well as of his responsibilities. The definition of assistance as a money payment leaves with the needy person responsibility, like that of others in the community, for deciding how best to use his income. Provision for a hearing before the State agency protects individual rights when a needy person has been denied aid or is dissatisfied with the amount of his assistance payment, or when his application has not been acted upon with reasonable promptness. His privacy is safeguarded by preventing disclosure by the agency of personal information that would subject him to indignity or embarrassment.

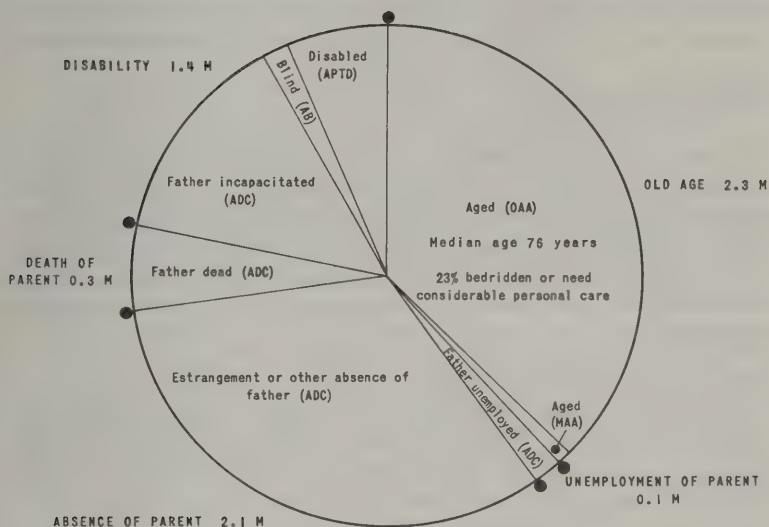
CHART 2.—PUBLIC ASSISTANCE HIGHLIGHTS, 1961*



* 51 jurisdictions with programs in both 1950 and 1961.

** Includes general assistance under State and local programs.

CHART 3.—MAJOR CAUSES OF DEPENDENCY OF PUBLIC ASSISTANCE RECIPIENTS,*
JUNE 1961
6.2 Million



* Excludes general assistance recipients under State and local programs.

The availability of Federal funds to the States and the placement of responsibility for the program with a single State agency has served as an impetus in establishing or strengthening State departments of public welfare throughout the country. The flexibility inherent in the public assistance program has also permitted its adaptation to meet some of the changing needs of the American people.

Through subsequent legislative changes, the scope and coverage of the public assistance programs were broadened to include the permanently and totally disabled; the aged, the blind or disabled recipients who are patients in public medical institutions; the costs of medical care or other remedial care paid directly to doctors, hospitals, and other suppliers of such services; needy adults responsible for the care of dependent children; children aged 16 and 17, without regard to school attendance; and children living with first cousins, nieces, and nephews (in addition to previously specified relatives).

The amount of Federal financial aid to States has been increased on several occasions through various devices to make it possible for assistance payments to keep pace with rising costs of living. Measures were added to improve medical care provisions for the needy. Clarification was also made of the availability of Federal financial participation in the costs of providing staff services to help needy persons find and use their own strengths and available resources to develop their potential for more satisfying and independent living.

New Legislation

Although the public assistance titles of the Social Security Act were amended by almost every Congress since 1935, an unprecedented amount of legislation was passed during the closing days of the 86th Congress and the first session of the 87th Congress. The legislation passed in fiscal 1961, outlined below, continued to strengthen existing provisions, but also charted paths new to the public assistance program.

Public Law 86-571, July 1960

The Department of Health, Education, and Welfare was authorized for the first time to provide reception service and hospitalization at Saint Elizabeths Hospital, or elsewhere, for certain repatriated mentally ill nationals of the United States.

Public Law 86-778, September 1960

A new program of medical assistance for the aged was established. Federal funds were made available to enable the States to help those older persons not receiving old-age assistance who are able to meet normal expenses but do not have sufficient income or resources to meet the costs of necessary medical services.

Increased Federal financial participation was made available to States that made payments to suppliers of medical care in behalf of recipients of old-age assistance. In addition to the usual share in assistance payments up to a monthly maximum of \$65 per aged recipient, additional Federal sharing was provided based on expenditures for payments to suppliers of medical care up to a monthly maximum of \$12 per recipient.

Federal financial participation was permitted for the first time in State vendor medical care payments (under both the new medical care program and the old-age assistance program) in behalf of patients in a medical institution as a result of a diagnosis of tuberculosis or psychosis for 42 days after such diagnosis.

Dollar limitations on the total annual amount of Federal funds for Puerto Rico, the Virgin Islands, and Guam were increased for medical care payments made in behalf of recipients of old-age assistance.

Effective July 1, 1962, a State agency, in determining need for blind assistance, must disregard the first \$85 of earned income per month plus one-half of earned income in excess of \$85. Until then, beginning October 1, 1960, a State is per-

mitted to disregard the first \$85 per month and one-half of the excess or to continue to apply the \$50 per month exemption as under the old law.

Special legislation providing for the approval of the Missouri and Pennsylvania blind assistance plans, due to expire June 30, 1961, was extended to June 30, 1964.

Public Law 87-31, May 1961

The aid to dependent children program was temporarily broadened to provide assistance to needy children in families where the breadwinning parent is unemployed. (From May 1, 1961, through June 30, 1962.)

Federal financial participation was permitted in the State's expenditures for foster care for a child receiving aid to dependent children who, as a result of a judicial determination is removed from his own home because he lacked proper care and protection, and placed in an approved family home; and for whose placement and care the agency administering the State plan for aid to dependent children is responsible. (From May 1, 1961, through June 30, 1962.)

September 1, 1962, was set as the date after which Federal funds will be withheld from a State whose plan, as required by State legislation, provides for denying assistance to a needy child living in a home considered by the State to be detrimental to his well-being. (Date postponed from June 30, 1961.)

Training grants for public welfare personnel authorized by amendments in 1956, effective July 1, 1957, for 5 years, were extended through June 30, 1963; and the Federal share of State expenditures for training purposes was raised from 80 percent, as authorized in 1956, to 100 percent, effective for allotments through June 30, 1963. (No appropriation was made for this purpose for fiscal 1962.)

The average amount of vendor medical payments in which there is additional Federal participation for old-age assistance was raised from an average monthly expenditure per recipient of \$12, as provided under the 1960 amendments, to \$15.

Public Law 87-64, June 1961

The Federal share of assistance payments under programs of old-age assistance, aid to the blind, and aid to the permanently and totally disabled was temporarily increased. The first \$30 per recipient per month, in which Federal participation is 80 percent, was raised to \$31, and the maximum average payment in which the Federal Government will participate (exclusive of the special provision for additional Federal participation in vendor medical payments in old-age assistance) was raised from \$65 to \$66. (From October 1, 1961, through June 30, 1962.)

Dollar limitations on the total annual amount of Federal funds for Puerto Rico, the Virgin Islands, and Guam were increased to facilitate their implementing liberalizations authorized by the new legislation.

Assistance was provided for United States citizens and their dependents repatriated from a foreign country because of personal misfortune or international crisis, who are in need of temporary assistance after reaching a port of entry in the United States.

Trends in Caseloads and Expenditures

In June 1961 assistance was available in all 54 jurisdictions of the country (including the District of Columbia, Guam, Puerto Rico, and

the Virgin Islands) under the federally aided programs of old-age assistance, aid to the blind, and aid to dependent children (6 jurisdictions administering aid to dependent children also made payments to unemployed-parent families, and 1 jurisdiction made payments for the foster care of children). Federally aided programs for the permanently and totally disabled were administered by 50 jurisdictions, and 9 States made payments under the new program of medical assistance for the aged. General assistance (wholly State and/or locally financed), in some form for some persons, was available in all 54 jurisdictions.

A total of 7.2 million persons received aid in June 1961 under the six public assistance programs (including general assistance). The increase of 442,000 persons over the number aided in June 1960 largely reflects the impact of the 1960-61 recession. The year's greatest changes in number of recipients were increases of 360,000 in the Federal-State aid to dependent children program and 80,000 in State-local general assistance—the two programs most sensitive to changes in economic conditions. The size of the aid to dependent children program is undoubtedly also affected by the continuing rise in child population; by July 1961, there were 67,063,000 children—more than a third of the total population in the 54 jurisdictions of the country—under 18 years of age.

In aid to dependent children, the 3,383,000 recipients, including 2,613,000 children in 878,000 families, assisted in June 1961 represented an increase from June 1960 of 11.9 percent. Part of this increase was due to the addition of 112,000 recipients in unemployed-parent families, the majority of whom had been transferred from general assistance programs.

The 1,049,000 persons, in 406,000 cases, receiving State and/or locally financed general assistance in June 1961 represented an 8.2-percent increase, over June 1960. Beginning in April, however, there was a sharp decline in the number receiving general assistance, which continued steadily through the end of the fiscal year (from 1,607,000 persons in 525,000 cases in March to 1,049,000 persons in 406,000 cases in June). The number in unemployed-parent families transferred from general assistance to the extended aid to dependent children program accounted for less than a fifth of this decline.

The number of recipients of aid to the permanently and totally disabled also rose, from 363,000 in June 1960 to 384,000 in June 1961, an increase of 5.8 percent. By June the new program of medical assistance for the aged was aiding 46,000 persons, most of whom had formerly received care in medical institutions or nursing homes under old-age assistance programs. The other federally aided programs showed decreases; old-age assistance, from 2,359,000 to 2,296,000 per-

sons—a drop of 2.6 percent; and aid to the blind, from 108,000 to 106,000 persons—a drop of 2.2 percent.

Total assistance expenditures, including vendor payments for medical care, for all six programs for the fiscal year 1961 were \$3,944 million—a 5.7-percent increase over expenditures in 1960. Total payments rose \$97 million or 9.5 percent in aid to dependent children; \$29 million or 10.7 percent in aid to the permanently and totally disabled; \$12 million or 0.6 percent in old-age assistance; and \$2 million or 1.7 percent in aid to the blind. In the State and/or locally financed programs of general assistance, total payments (excluding vendor payments for medical care) increased \$28 million or 8.3 percent. Payments under the new program of medical assistance for the aged totaled \$40 million in fiscal 1961.

Although the national average assistance payment did not increase in all programs, higher total expenditures reflect in part other efforts to offset the continuing rise in living costs, with the medical care component showing the greatest relative increase. For example, cost standards were raised in one or more programs in about a third of the States; in old-age assistance, 7 States raised their maximum on individual monthly payments, and a smaller number liberalized maximums in each of the other programs; several States broadened the scope of medical care provided through vendor payments; and a few States made their first medical care vendor payments in behalf of old-age assistance recipients.

In aid to dependent children, the national average payment was \$30.30 per recipient in June 1961, compared with \$29.11 a year earlier. Average payments ranged from \$9.32 in Alabama (except for \$3.82 in Puerto Rico) to \$51.61 in Connecticut.

In old-age assistance, the average payment was \$67.85 per recipient in June 1961, compared with \$68.01 in June 1960. Average payments ranged from \$35.40 in Mississippi (except for \$8.30 in Puerto Rico) to \$96.51 in Colorado. In medical assistance for the aged, the average medical cost paid per recipient in the 9 States making payments in June 1961 was \$200.59. For all States, the median medical care vendor payment under old-age assistance increased from \$7.54 per recipient in June 1960 to \$11.32 in June 1961.

In aid to the permanently and totally disabled, the average payment per recipient was \$68.19 in June 1961, compared with \$65.96 a year earlier. Average payments ranged from \$34.85 in Mississippi (except for \$8.70 in Puerto Rico) to \$132.90 in Massachusetts.

In aid to the blind, the average payment per recipient was \$73.36 in June 1961, compared with \$72.85 a year earlier. Average payments ranged from \$38.43 in Mississippi (except for \$8.27 in Puerto Rico) to \$126.45 in Massachusetts.

For the 53 jurisdictions reporting on State and/or locally financed general assistance programs, excluding medical care vendor payments, the average payment per case was \$65.13 in June 1961, compared with \$67.44 in June 1960 (46 percent of all cases were family cases, including an average of 4.4 persons per family). Average payments ranged from \$12.89 per case in Alabama (except for \$7.27 in Puerto Rico) to \$110.76 per case in New Jersey.

The number of persons receiving both old-age, survivors, and disability insurance benefits and old-age assistance payments continued to increase. In February 1961, about 715,400 old-age assistance recipients, or 31 percent (compared with 28.5 percent in 1960 and 19.2 percent in 1955) were receiving assistance because their insurance benefits and other resources were insufficient to meet their basic and/or special needs, such as medical care. The percentage of recipients of other types of public assistance who also received old-age, survivors, and disability insurance benefits was considerably smaller—18.1 percent of those receiving aid to the blind, 8.6 percent of those receiving aid to the permanently and totally disabled, and 5.4 percent of the families receiving aid to dependent children.

SOURCE OF FUNDS FOR PUBLIC ASSISTANCE PAYMENTS

Of \$3,939 million expended for the six public assistance programs in fiscal 1961, about 52 percent, or a little over \$2,049 million, came from Federal funds; 35.9 percent, or \$1,413 million, from the States; and 12.1 percent, or \$477 million, from the localities (of which \$209 million was spent for general assistance).

For the five special types of public assistance, the Federal share of total costs was 59 percent; the State share, 33.3 percent; and the local share, 7.7 percent. Assistance payments during 1961 represented about 0.9 of a cent per dollar of total personal income in the Nation during 1960.

Program Developments

Major program changes resulted from legislation passed during fiscal 1961. Significant developments also occurred in other areas.

INCREASED PROVISIONS FOR MEDICAL CARE

Federal funds were made available for the first time to help States meet the cost of medical care needs unrelated to the need for maintenance through the establishment of a new program of medical assistance for the aged. Additional Federal funds (beyond the usual share in assistance payments) were also made available to States that make vendor medical payments in behalf of old-age assistance recipients.

PROVISIONS OF THE NEW MAA PROGRAM

The new program of medical assistance for the aged authorized by legislation passed in September 1960 provided Federal funds to enable the States to help pay for medical care for the older persons not receiving old-age assistance who are able to meet regular living expenses but cannot meet the costs of unusual medical services. Federal participation under the new program, limited to expenditures paid in behalf of eligible recipients to suppliers of medical or remedial care, ranges from 50 to 80 percent, depending upon the relationship between the per capita income in the State and the national per capita income.

No maximum is set on the amount of the payment made by a State with Federal participation. The States are given considerable latitude in determining the scope of the program, including both the conditions of eligibility and the kinds and extent of services for which costs will be assumed. However, among conditions imposed by the Federal act were the *inclusion* of both institutional and noninstitutional care and services; and several *prohibitions* including: a durational residence requirement; the placing of a lien against the property of any individual prior to his death on account of medical assistance properly paid in his behalf or recovery of such assistance from his estate until after the death of the surviving spouse, if any; and any charge, such as an enrollment fee or premium, as a condition of eligibility.

Congress also directed the Department of Health, Education, and Welfare to develop guides and standards on the level, content, and quality of medical care and services for States to use in evaluating and improving their medical care programs; and to evaluate the effectiveness of the new legislation and make recommendations for improving State medical care programs.

ADDITIONAL PROVISION FOR OAA RECIPIENTS

In September 1960 increased Federal funds also were made available to States that make vendor medical payments in behalf of old-age assistance recipients to provide an additional amount (beyond the usual share in assistance payments) based on expenditures for these payments up to a monthly maximum of \$12 per recipient. In May 1961 this maximum was increased to \$15.

The establishment of a medical care program for the aged not receiving assistance, plus the provision of additional money specifically for medical care for old-age assistance recipients, greatly augmented the amount of medical care available previously under federally aided public assistance programs. Although most of the Nation's jurisdictions (44 out of 54 in June 1960) had some provision in their

public assistance programs for costs of medical care through the vendor payment, and some of the jurisdictions provided for some items of medical care in the money payment to the recipient (including 6 of the 10 that did not use the vendor payment), the majority of the States provided for only limited medical care, financing one or more services, but not the broad scope of services needed by most sick people.

IMPLEMENTING THE MEDICAL CARE LEGISLATION

The early effective date of the medical care legislation (passed in September 1960 and effective October 1, 1960) spurred action by Federal and State agencies.

The day the President signed the 1960 amendments, a group of State representatives met with Bureau staff to advise on the medical care provisions. Representatives of the American Medical Association, the American Hospital Association, and the Bureau also held special meetings in Washington on the new program. The American Medical Association, which gave full support to the 1960 legislation, encouraged their State organizations to urge action in their respective States, and the American Hospital Association appointed a committee to work with the Bureau in relation to the new program. Many inquiries came from State welfare agencies and medical societies asking for consultation on various aspects of medical care under consideration in State planning, and for interpretation of the clause in the amendment requiring "reasonable standards" of financial need.

A new Division of Medical Care Standards was established in the Bureau, and a group of 16 physicians and specialists in paramedical areas was appointed to advise on medical matters. Consideration of major policy issues, development of instructional material for State use, and issuance of interpretive materials on the new provisions were given high priority. Policy and administrative questions were discussed with departmental, regional, and State agency staff and with other interested agencies and groups. Broad national policies were developed against which States could prepare their plans, and procedures were shortcut wherever feasible.

Consultation was provided to State agencies on the development of necessary State legislation and plans to put the new medical care provisions into effect. State officials met with Bureau staff in Washington to consider specific State situations, and special legislative sessions were held in several States to obtain a legal base and appropriations for initiating new, or modifying existing, programs.

Within a month after the effective date of the legislation, 12 States started action to put the new program into effect. In March 1961, when close to 50 State legislatures were in session, some 20 States

considered measures to establish programs of medical assistance for the aged. By the end of August 1961 legislation establishing such programs had been passed or was in process in 33 States—14 States had new programs in operation, 4 States had completed plans for new programs, 8 States had enacted legislation but had not yet completed their plans, 4 States were still working on legislation to provide a legal base or appropriation for the program, and 3 States had obtained legal authority but no appropriation.

Data obtained by the Bureau from the 14 States with programs of medical assistance for the aged on August 31, 1961, revealed that all but 4 began on a conservative basis; 10 set a maximum on the amount of income recipients may receive, ranging from a low of \$1,140 for a single recipient with no dependents, to a high of \$3,000, with varying allowances for dependents; and 11 States placed major limitations on the care for which they would pay. All 14 States exempt real property used as a home but take into account the resource value of other real estate in determining the value of assets, although most do not require its liquidation. Most exempt a life insurance policy with a small cash surrender value, but consider as assets medical insurance policies and similar resources designed to meet medical costs. A reserve of cash or "resources convertible to cash," ranging from \$300 to \$5,000, is permitted in 9 States. The hospital stay to be paid for ranges from 10 days per year in 1 State to as many as are necessary in others. Hospital care is limited by 7 States to acute, life-endangering, or traumatic conditions requiring hospital care; and 7 others provide hospital care as recommended by the physician. The cost of nursing home care is included by 8 States, but 4 of these restrict it to post-hospital or convalescent care.

In 11 States, the noninstitutional-care provisions include physicians' services in the home and office; some of these States limit the services to acute conditions or to treatment necessary to prevent hospitalization. The most frequently covered services, in addition to those of the physician, are dental services to relieve pain or treat acute infections, and prescribed drugs, which in some States are limited to drugs needed for acute or life-endangering conditions. In five States costs are assumed for the four basic medical care needs (hospital care, nursing home care, physicians' services, and prescribed drugs); in nine States, one or more of these services is not included.

The additional Federal funds made available for medical care costs of old-age assistance recipients was used by 23 States to improve the content or coverage of medical care provisions in their old-age assistance programs, and 1 planned to do so by January 1962. Of the 11 States with no previous provision for medical care vendor payments, 8 either added such provision, or planned to do so by January 1962.

In some of the 18 States that did not add or improve vendor medical care provisions in their old-age assistance programs, the additional Federal funds made it possible to avoid cuts in provision for medical services by preventing or eliminating deficits in State funds, or enabled an increase in grants to recipients of other public assistance by the release of State funds.

The content of medical care service for which costs are assumed for recipients of old-age assistance is considered comprehensive or relatively so in 26 States. These States provide for hospitalization, nursing home care, and physicians' services without significant limitations as to the nature of the patient's illness, unit cost of care, number of days of care, or number of visits to or from a doctor. While several of these States have some limitations, most of them meet the cost of practically any needed and available care. The 21 States with more limited provisions most frequently pay only for hospitalization and nursing home care. In some of these States, responsibility for the cost of hospitalization is further restricted to cases of acute illness and emergencies.

PROVISIONS FOR NEEDY CHILDREN EXTENDED

The number of children dependent on public aid is at an all-time high. However, even with a 37-percent increase in total child population, and with extensions in the aid to dependent children program that include additional needy children, there was only a slight increase—from 3.5 to 3.7 percent—in the proportion of children receiving aid in June 1961 compared with a decade ago.¹ In the 50th anniversary year of the initiation of the first State mother's aid program, legislation passed in 1961 contributed several major, although limited, extensions in the Nation's provisions for these needy children.

Extension of ADC to Unemployed-Parent Families

As part of national planning to stimulate recovery from recession, the aid to dependent children program was temporarily extended to children in families where the breadwinning parent was unemployed. This was the first time since 1935 that Federal funds were made available through public assistance to help children in families hard-pressed because of unemployment. Provision was also made for cooperative arrangements with State employment and vocational education agencies to help the unemployed parent secure employment and to have more training if he needs it, as well as for denial of aid when a bona fide job offer is declined without good cause.

The ADC legislation enacted in May and effective May 1, 1961, (through June 30, 1962) required early administrative action to help

¹ Percentages are related to the 51 jurisdictions for which comparable data are available for 1961 and 1950.

States implement its provisions, as well as development of national policy and establishment of new program relationships. Bills had been prepared by some States to permit temporary extension of ADC to needy children of unemployed parents in anticipation of passage of this proposal while it was still before Congress, and a few States passed such extension bills contingent upon Federal action. By the end of August 1961, 12 States had made provision for aid to children of unemployed parents in their ADC programs, 3 States planned to do so in the near future, and legislation was still in process in 1 State.

The implementation of this provision in several States raised questions about the use of Federal funds for work relief projects. In response to expressions of public concern about providing assistance to employable persons, a departmental policy was publicized in June 1961 stating that, if a local community wants to require the unemployed parent to work on a public project for assistance given him, it may do so. However, Federal funds *may not* be used to pay any part of the individual's wages, since the Social Security Act does not authorize the use of Federal funds to match amounts paid by States as work relief; but Federal funds *may* be used to pay a share of the payment that covers the difference between the parent's earnings on the project and the family's need as determined under the State's assistance standard. (This is similar to the provision for Federal participation in assistance payments which supplements wages from private employment insufficient to meet a family's need.)

Provision for Foster-Family Care

The ADC program was also extended in May 1961 to provide foster-family care for a child receiving aid to dependent children who, as a result of a judicial determination, is removed from his own home because he lacks proper care and protection and is placed in a State-approved or licensed family home, and for whose placement and care the agency administering the State plan for aid to dependent children is responsible.

Under the new foster-family care legislation, the State must provide for developing a plan for each child to assure proper care while he remains with a foster family (including periodic review of the necessity for continuing in foster care); the provision of services to improve the conditions in the home from which he has been removed, or to arrange for his placement in the home of another close relative; and the use of public child welfare services staff to the maximum extent practicable in the placement of the child.

To help States implement this temporary extension of ADC (from May 1, 1961, through June 30, 1962) a joint Bureau of Public Assistance and Children's Bureau committee immediately began work on

developing national policies and procedures, and exploring ways in which the two Bureaus could work cooperatively with the States.

Draft materials were reviewed in joint meetings of regional and central office staff. By the end of August 1961, the foster-family care provision was incorporated by 10 States in their aid to dependent children programs, 7 States planned to do so in the next few months, 12 States that did not expect to need legislation to implement the provision were still considering it, and in 6 States, legislatures considered but did not adopt the provision.

Relation of foster-family care legislation to State action around "unsuitable homes."—The foster-family care legislation was precipitated by the denial of aid by several States to needy children living in so-called "unsuitable homes." Although 24 State ADC plans carry some reference to "suitable homes," most of them include provisions to enable public welfare agencies to help make plans for the child's best interests, and continue assistance until the plan has been carried out. Eight State plans, however, denied assistance without assurance that an arrangement suitable for the child's upbringing is worked out. In these States, if the child's home was found to be "unsuitable" the child could be left in the home, deprived of needed support. The plan provisions in these States raised grave question as to whether they were consistent with the intent of the aid to dependent children and child welfare provisions of the Social Security Act.

The issue was brought to a head in July 1960 when one State (Louisiana) enacted legislation under which the State terminated aid to about 23,000 needy children—ostensibly because they lived in "unsuitable homes." In this instance, State legislation denied assistance to children if the adult caretaker was living with, but not legally married to, a mate; or if the mother had had an illegitimate child at any time since first receiving assistance, unless she could prove to a parish welfare board that she had ceased illicit relationships and was maintaining a suitable home for her children.

Public reaction to the withdrawal of assistance from such a large group of needy children resulted in widespread public protest. A large number of national welfare agencies and citizens' groups urged the Department to take appropriate action to protect needy children against such hardships. Many individuals and agencies expressed indignation over the injustice of denying children aid because of the conduct of their parents, and concern about the effect of deprivation on the children as well as its long-run harmful effect on the Nation.

The Commissioner of Social Security held a hearing on the State's action in the fall of 1960 in order to determine whether the State's ADC plan was being administered substantially in accordance with the requirements of the Social Security Act. A large number of na-

tional welfare and church organizations united in expressing their concern; many adopted resolutions or prepared statements expressing their opinions and philosophy in relation to the issue; and several presented briefs as "amicus curiae" in connection with the hearing. Some also expressed concern about other needy children in the State in the event of withdrawal of Federal funds.

Following the hearing, the State revised its plan, eliminating its more serious program defects and providing for skilled protective services to be available to the children affected by the suitability provision. In the absence of any Federal requirement prohibiting States' use of "suitable home" as an eligibility factor, and with acceptable revisions in the State plan, the Commissioner in January 1961 ruled that the State plan for aid to dependent children provided a basis for continued receipt of Federal payments.

Subsequently, the Secretary of the Department concluded that "... when a needy child who otherwise fits within the ADC program of the State is denied the funds that are admittedly needed to provide the basic essentials of life itself because of the behavior of his parent or other relative, the State plan imposes a condition of eligibility that bears no just relationship to the ADC program . . . [and] that eligibility conditions with the effect described above are not compatible with entitlement for continued Federal grants." The Commissioner of Social Security subsequently approved the following requirement issued by the Bureau effective July 1, 1961:

A State plan for aid to dependent children may not impose an eligibility condition that would deny assistance with respect to a needy child on the basis that the home conditions in which the child lives are unsuitable, while the child continues to reside in the home. Assistance will therefore be continued during the time efforts are being made either to improve the home conditions or to make arrangements for the child elsewhere.

The foster-family care legislation passed in May 1961 confirmed and supported this departmental policy, but postponed its effective date from July 1, 1961, to September 1, 1962, to allow additional time for any State that required legislative action to make necessary plan changes. Five of the 8 States were able to amend their plans to continue assistance until children in homes found "unsuitable" were removed from their homes. Three States (Louisiana, Michigan, and Mississippi) were unable to meet the requirement under their existing legislation, and qualified for the extension of time.

Other Developments in ADC

During the year, the school attendance requirement for children 16 and 17 years old was eliminated in Illinois and South Dakota; and Nevada raised the eligibility age limit from 16 to 18, with the provi-

sion that the child between 16 and 18 be regularly attending school and receiving passing grades. There are now only 2 States in which assistance is not continued to age 18, at least for children attending school—Georgia has an age limit of 16 years, regardless of school attendance, and Texas limits assistance to children under 14. However, all but 10 States still have a durational residence requirement; 11 States still do not include children living with first cousins, nephews, or nieces; and 1 State (Texas) excludes a child who is not a United States citizen.

WELFARE SERVICES STRENGTHENED

Consultation to States and preparation of informational, interpretive, and in-service training materials continued on various ways of providing services to persons dependent on public assistance. Cooperative relationships were maintained with various national public and voluntary agencies concerned with families and children, the aging, homemaker services, or community planning, with participation on various committees of these organizations in joint effort to develop new methods of providing help to those in need. Primary emphasis was given to strengthening welfare services appropriate to social and economic problems of families and older persons.

In relation to families, activities centered around services to strengthen family life, and to deal with special problems such as illegitimacy, neglect of children, inadequate home management, and care of children. A pamphlet, *Unmarried Parents—A Guide for the Development of Services in Public Welfare*, was prepared jointly by the Children's Bureau and the Bureau of Public Assistance to provide guidelines for public welfare agencies in developing or improving services to unmarried parents. Similarly, an addendum to the 1958 Directory of Homemakers published in the Homemaker Service Newsletter was prepared jointly with the Children's Bureau and the Public Health Service. Work also was initiated on a project to teach ADC mothers housekeeping skills.

States generally are concerned about the need for earlier recognition of conditions detrimental to children or disruptive of family life. Some States are instituting experimental or demonstration projects to help families improve their situation and increase their capacity for self-care, more independent living, or self-support. To assist States in these developments, consultation was provided on family-centered services, with emphasis on preventive measures such as adequate care and guidance of children, and planning with parents to assure the health and education of their children. Materials were also developed illustrative of the role of the public welfare worker in providing specific, concrete services to improve the home and strengthen family life. States were also given help in evaluating their efforts.

Attention to the problems and needs of the aging was accentuated by the White House Conference on Aging. Bureau staff participated in the Conference held in January 1961 by serving as technical directors for the sections on Social Services, and Family Life, and in taking active roles in sections on Medical Care, Income Maintenance, Community Planning, and the Role and Training of Personnel. They also assisted in the preparation and distribution of *Background Papers on Family Life and Social Services*; in providing statistical and other background material used by the delegates; and in drafting some of the Conference reports. Pertinent Conference recommendations were summarized and made available to the States; their implications were also considered in Bureau work planning.

Technical assistance was provided to the American Public Welfare Association's Project on Aging, including the planning and conducting of institutes on public welfare program planning and staff development in behalf of older persons. The Bureau joined with the APWA, National Committee on Aging, and Family Service Association of America in sponsoring a Seminar on Casework Services for Older People at Arden House in the fall of 1960 for selected staff from public and voluntary agencies. The summary of the Conference has had wide distribution. Bureau staff also continued to serve on committees of the APWA's Committee on Aging, and the National Council on Aging (formerly the National Committee on Aging).

Other efforts in strengthening welfare services included participation in planning for a national structure to promote homemaker services, working with a State in preparing a publication on its homemaker services in small or rural areas; drafting a document on the public assistance caseworker's role in services to the ill and disabled; and developing guides for use in the administrative review of State welfare services. Also a listing was made of the location of special studies and numerous experimentations on improving case services and their results, and assistance was provided to several States on administrative considerations in establishing specialized casework units and other organizational arrangements for staff providing direct services to individuals.

EFFORTS TO IMPROVE STANDARDS OF ASSISTANCE

Pamphlets were issued on *Establishing Money Amounts for Fuel for Heating*, discussing factors to be considered in applying the fuel formula developed by the U.S. Weather Bureau; and *State Methods for Determining Need in the Aid to Dependent Children Program*, describing how States' standards and income policies govern need determination in the eligibility process. Both reports were prepared as part of Bureau follow-up on recommendations made in 1960 by

the Advisory Council on Public Assistance. Technical assistance was also provided on request to the Department of Agriculture in their planning for the food stamp plan.

Administrative Developments

Legislation passed in fiscal 1961 added broad responsibilities to Bureau activities and substantially increased its workload. In addition to providing assistance to States in administrative and fiscal changes involved in implementing the new legislation, statistical, financial, and other reporting systems were initiated for operational purposes and for keeping the Secretary, the Commissioner, Congress, and the public informed as to program developments. Federal review of State practice under the new provisions was undertaken to assure that it was in keeping with congressional intent and used methods required for proper and efficient administration.

The Bureau's limited resources were stretched to prepare interpretive materials and correspondence in response to public interest heightened by the controversial nature of some of the social issues emerging in the implementation of the new legislation, and to cooperate with other groups, as requested, on special projects. For example, the Department was asked by the Senate Special Committee on Aging to cooperate in a special inquiry addressed to all State agencies on plans and accomplishments to date in their programs of medical care for the aged and provisions for medical care under old-age assistance.²

Effort was also made to obtain data about the effectiveness of the new legislation. For example, *Selected Characteristics*, covering financial eligibility and the scope of medical services provided, initially developed for the States with such plans in operation, was kept current as additional States revised or added new programs; and information is being obtained for a more comprehensive publication on the characteristics of medical and remedial care provisions of State public assistance plans. Planning was also initiated for evaluating the experience gained in administering the new provisions as a basis for recommending future improvements.

Other assistance was provided to the States on methods of issuing and accounting for payments to suppliers of medical care in behalf of assistance recipients, administration of urban agencies, manual and records management systems, field services, and methods of supervision. To meet increasing interest of States, efforts were intensified in developing caseload standards, including evaluation of work done

² The Staff Report to the Senate Committee on Aging, *State Action To Implement Medical Programs for the Aged*, based on their inquiry in March, was issued in June 1961.

in other fields and its applicability to public assistance operations, and preparation of guides for use of States. A management conference was held in San Francisco in November 1960 focused both on improving services to urban agencies and on methods of organization and administration.

PUBLIC ASSISTANCE STAFF TRAINING

The preliminary report, *1960 Survey of Salaries and Working Conditions of Social Welfare Manpower*, based on a study made by the Bureau of Labor Statistics, in cooperation with the National Social Welfare Assembly and the Department of Health, Education, and Welfare, reveals the following pertinent data about State and local public assistance personnel:

34,500 persons in executive and social work positions in State and local public welfare agencies primarily on public assistance (a 15-percent increase from 1950 to 1960);

13 percent of the supervisory group (an increase from 10 percent in 1950), and slightly more than 1 percent of the casework group (a decrease from 2 percent in 1950), had *full professional social work training*;

nearly two-fifths of the supervisory group had *some graduate social work training*, as did 10 percent of the casework group (a decrease from 17 percent in 1950);

65 percent of the casework group had an *undergraduate degree* (an increase from 60 percent in 1950); and

the 1960 median supervisor's salary was \$5,797 a year, and the median caseworkers' salary was \$4,338. Salary increases ranged from 60 to 75 percent over the 10-year period with 23 percent reflecting rising living costs.

The situation in 1960 represents a slight gain since the first welfare manpower survey was made in 1950, but it also reveals the inadequate preparation of the majority working in social work positions in the public assistance programs:

Slightly more than a third have not completed college;

89 percent of the caseworkers have had no study in any graduate school of social work;

19 out of 20 have not completed graduate professional training (99 percent of the caseworkers and 87 percent of the supervisory staff); and

there is only 1 caseworker with full professional training for every 23,000 assistance recipients.

The limited number of professionally qualified staff administering the public assistance programs is considered by many groups a major obstacle in the provision of more effective services that could help lessen dependency, prevent further deterioration, and mitigate the effect of need on individuals, families, and communities.

With Federal funds paying half the cost, some in-service training is provided by most State agencies, and during the past year about 550 public assistance workers in 39 jurisdictions were on educational leave (4 out of 5 were receiving some Federal or State money to help pay for their training).

An Educational Standards Project was established by the Bureau to determine more clearly the scope and level of performance which can reasonably be expected of the worker with a bachelor's degree. Work undertaken toward this objective has included (1) identifying specifically the variety of functions which make up the public assistance caseworker's job, and (2) determining which of these functions a worker with a bachelor's degree can perform acceptably. Professional judgment is being utilized in making tentative decisions, and research designs are being developed to test these judgments. While concentrating first on the job of the caseworker, such determinations will be made subsequently for other jobs.

The preparation of a textbook to serve as a guide for in-service training of new public assistance workers was initiated, and plans made for developing appropriate teaching materials on casework concepts for staff without professional education. Work continued on developing and testing of in-service training materials to help staff improve services provided to the aging.

As part of its plan initiated in 1960 to provide short-term training seminars for State agency staff, the second session for State welfare field representatives was held in October and November 1960. In collaboration with the Children's Bureau, a *Handbook of Staff Development* is being prepared containing suggested standards and guides for State welfare agencies. Wyoming's training plan for potential county directors was published in the Bureau's "How They Do It" series and distributed to State agencies.

States were encouraged to extend opportunities for academic training under the 50-50 Federal matching provisions for the costs of administration, to develop other methods of improving staff competence, and to make more effective utilization of professionally trained staff. Consultation and other resources were also provided to schools of social work and others, as requested, including participation on various committees of the Council on Social Work Education, and on the American Public Welfare Association's Committee on Social Work Education and Personnel. Cooperative activity was also undertaken with other units within the Department on training aspects of areas of mutual concern.

The Bureau's training plans for its Federal employees were both long-range, in relation to program needs; and short-term, in relation to training opportunities appropriate to job duties provided under the Government Employees Training Act. Long-range planning in-

volved full-time outside training of selected staff members to achieve objectives in knowledge essential to program development; short-term planning brought special seminars to Bureau staff, and provided training opportunities for 8 employees in government-sponsored training activities, and for 34 employees in non-government facilities.

Related Program Activities

INCREASED RESPONSIBILITY FOR CIVIL DEFENSE EMERGENCY WELFARE SERVICE PROGRAMS

The Emergency Preparedness Order No. 5 signed by the Director of the Office of Civil and Defense Mobilization on January 10, 1961, assigned certain civil defense mobilization functions concerning education and welfare to the Secretary of Health, Education, and Welfare.³ These functions were delegated by the Secretary to the Commissioner of Social Security, and are carried out by the Bureau of Public Assistance, working with the Children's Bureau.

Emphasis during the past year was focused on organization, recruitment, orientation to emergency welfare services responsibilities, and preparation of national guidance materials to help State welfare departments in developing State-local emergency welfare service programs, including training activities. Progress was made in establishing working relationships with constituent units in the Department of Health, Education, and Welfare, the Office of Civil and Defense Mobilization, and other Federal departments and agencies having competencies related to emergency welfare services.

Arrangements were made for participation of national voluntary welfare and related agencies to facilitate participation by local voluntary agencies in Emergency Welfare Service activities. "Memoranda of Understanding" were completed with 12 national voluntary and related agencies⁴ incorporating their role in support of the Government in pre-attack planning and post-attack operations. Negotiations continue with other such agencies. Copies of the completed "Memoranda of Understanding" have been distributed through voluntary and public channels.

Work was also initiated on a nationwide inventory of welfare manpower and other basic welfare resources. Information about these resources will be stored on punchcards or magnetic tape for use by

³ The Order was not rescinded by Executive Order 10952 (dated July 20, 1961) assigning certain civil defense responsibility to the Secretary of the Department of Defense.

⁴ American National Red Cross, Child Welfare League of America, Council of Jewish Federations and Welfare Funds, Council on Social Work Education, Family Service Association of America, National Association of Social Workers, National Catholic Welfare Conference, National Conference of Catholic Charities, National Council of the Churches of Christ in the United States of America, National Travelers Aid Association, The Salvation Army, and United Community Funds and Councils of America.

the Office of Emergency Planning's National Resource Evaluation Center in identifying and locating resources still existing after an attack, and in developing estimates of casualties. Identification of the location and number of State and local public assistance offices and personnel has already been completed. The Bureau was also assigned responsibility for developing information about requirements for items relating to body protection and household operations needed for survival. This information also will be used to determine where shortages or surpluses now exist.

Progress was made on the development of guidance materials. A document, *Emergency Welfare Service—Guidelines and Structure*, was released in draft form in March for review and preliminary testing to State and local public welfare agencies, national voluntary agencies, and to State civil defense directors. *Fiscal Policies and Federal-State Agreements*, which was issued in April, includes model forms by which States could amend or supersede their 1956 agreements to accept responsibilities under the expanded emergency welfare service program assigned to D/HEW. (Several States have signed these new agreements to strengthen and support the Emergency Welfare Service programs.)

States were encouraged to undertake Emergency Welfare Service training of State and local welfare staff as part of their regular staff development activities. *Outline Plan for Development of Emergency Welfare Service Training Materials*, a syllabus of source material for training persons who will carry emergency social service responsibility in local welfare centers, was drafted to facilitate such training. Federal civil defense informational materials also were made available to States, and a bibliography of materials pertinent to training in emergency welfare services was initiated.

Plans were developed with OCDM⁵ for a coordinated and comprehensive training plan with their Office of Training and Education under which EWS was given responsibility for providing the emergency welfare services content for courses given at OCD-DOD college and instructor training centers. An orientation document for key individuals in civil defense was developed for use in conjunction with regular and specialized courses.

Work is underway on "how-to-do-it" materials on emergency lodging, emergency feeding, emergency clothing, emergency social services, and emergency welfare registration and inquiry. A handbook, *Civil Defense Emergency Planning in Welfare Institutions*, is being prepared for the guidance of superintendents of welfare institutions. Those aspects of emergency social services which deal with the

⁵ On August 1, 1961, the training and education function was transferred to the new Office of Civil Defense, Department of Defense (OCD-DOD).

care of children, especially those separated from their parents, are being prepared by the Children's Bureau representative and the emergency welfare services staff.

Staff was assigned to five D/HEW regional offices to facilitate communication between the central office and the States, with plans to staff the remaining regions in 1962. Two regional and three bi-regional meetings were held during the year with representatives of State public welfare agencies; highlights of the guidance materials were presented and discussion was held on the responsibility of public welfare in providing technical leadership in developing and carrying out essential welfare service functions in time of emergency.

Policy material was prepared on the use of Federal matching funds by State and local welfare departments for civil defense purposes, and merit system examinations were prepared for State emergency welfare services personnel. An exhibit on emergency welfare services was prepared for use at the National Conference on Social Welfare held in Minneapolis in May. A pilot project on natural disaster training was conducted by the American National Red Cross Disaster Services for emergency welfare services staff to assist in evaluating the adaptability of the course content and its method for training purposes for a war emergency. EWS staff also participated in the first phase of the 1961 "Operations Alert" exercise.

ASSISTANCE PROVIDED TO CUBAN REFUGEES

The break in diplomatic relations between Cuba and the United States led to a heavy influx of Cuban refugees in the United States. Although many of the refugees were professionally or technically trained, a large proportion needed assistance of one kind or another—financial aid, employment counseling, retraining, or help in resettlement and adjustment to American customs.

Until February, a large part of the burden of providing care, maintenance, and shelter in the greater Miami area was borne by voluntary agencies and individuals. Recognizing that the problem was one affecting not only Florida but the entire Nation, President Kennedy, in January 1961, assigned responsibility to the Department of Health, Education, and Welfare for coordinating, intensifying, and expediting governmental and private aid to Cuban refugees. Federal funds from the Mutual Security Program were authorized for this activity.

With responsibility for developing and administering the program assigned to the Secretary, a 9-point program of assistance was formulated within 3 weeks, setting a precedent in speed. Working closely with the office of the Commissioner of Social Security, Bureau staff served on the survey team which made the initial reconnaissance visit

to Miami in late January. They also were members of the Department's task force which developed the basic data for a comprehensive Federal program of health, education, employment, welfare, and resettlement services for needy Cuban refugees. Assistance standards similar to those established for local residents by the Florida State Department of Public Welfare were used in the provision of the basic necessities of life, hospital care, and child welfare services. Surplus food commodities also were made available. To help relieve the Miami area of the impact of its refugee concentration, contracts were made with voluntary agencies for resettlement of refugees in other parts of the country, including help in obtaining jobs and in adjusting to new locations.

In February, the Bureau was assigned operating responsibility for temporary financial assistance, hospital care, and related social and welfare services to Cuban refugees. Policies and procedures were developed for use of State welfare agencies in administering this phase of the program as representatives of the Federal Government. Regional and central office staff worked closely in its implementation, and in making plans for the distribution of surplus commodities. Agreements were initiated with the Florida State Department of Public Welfare. In less than a week of intensive planning and recruiting of a bilingual staff, the State agency was prepared to accept immediate transfer of cases of needy refugees from voluntary agencies in Miami and from the long list of applicants registered at the Cuban Refugee Emergency Center.

First payments were made on February 27. A week later some 2,800 adults and 840 children were receiving financial aid. By the end of March, about 3,800 cases in the Miami area had received financial aid; about 42 percent of them were single-person cases. The average family payment was around \$85 a month.

Resettlement of refugees through voluntary agencies under contract with the Federal Government averaged about 250 families a month; from November through June, 4,672 refugees were resettled. The cooperation of other States was enlisted to provide help for relocated families who, for various reasons, were unable to maintain themselves. By the end of June approximately 8,700 cases had received assistance under the program in the Miami area. Of the \$2,275,000 allotted the Bureau between February 27 and June 30 for assisting Cuban refugees, all but \$5,000 was used in Florida.⁶

The speed and effectiveness of the cooperative effort of Federal, State, and local public and voluntary welfare agencies in aiding needy

⁶ The total amount allotted to the Bureau of Public Assistance included \$440,000 for the care of unaccompanied children but, except for fiscal aspects, responsibility for this segment of the program was assigned to the Children's Bureau.

Cuban refugees is both a tribute and a true test of the strength of the American social welfare structure and its ability to adapt its resources to meet serious emergency problems affecting the well-being of people.

ASSISTANCE TO U.S. NATIONALS REPATRIATED FROM OTHER COUNTRIES

The Bureau has continued to assist the Department of State in arranging for the reception and care of those American nationals and their dependents repatriated from other countries who need special help upon arrival in this country. During the past year, assistance was requested by the Department of State in behalf of 120 cases including 231 individuals from 32 countries. Thirty-nine of these cases involved mental illness. Through the cooperation and help given by public and private welfare agencies, primarily in New York, arrangements were made for emergency reception service, transportation, hospitalization, and other needed services.

Assistance was also provided to needy United States citizens and their dependents who fled to this country from Cuba. Many were without cash resources because they were prevented from taking money out of Cuba. Some had resided there for many years and had lost contact with relatives or friends in this country. With a special authorization of \$30,000 from the President's Emergency Fund, assistance was provided to help these repatriates return to the place where they formerly lived, or to join relatives who could assist them in re-establishing themselves in the United States. In July 1961 about 140 American families repatriated from Cuba were helped; about \$29,000 of the \$30,000 authorized for this purpose was used by Florida, and most of the remaining \$1,000 by other States.

During the year, the Bureau also developed plans for implementing legislation passed in July 1960, when funds are appropriated, to provide for reception and hospitalization at Saint Elizabeths Hospital, or elsewhere, of certain repatriated mentally ill United States citizens. The legislation, passed in June 1961, amended title XI of the Social Security Act to provide temporary assistance (through June 30, 1962) to other repatriated U.S. citizens who need help upon arrival in this country. This amendment is an outgrowth of a long period of program development and interdepartmental consideration.

INTERNATIONAL ACTIVITIES

Cooperative work with the SSA Office of International Activities during the past year included central office planning for and consultation to foreign visitors, and interpretation of U.S. social welfare programs to individuals and international groups referred by various Government agencies. Bureau regional staff also provided consulta-

tion and planned or arranged observation programs in cooperation with State and local public and voluntary welfare agencies for visitors from other countries. Comments were prepared on United Nations' documents, and suggestions made for social welfare projects to be included in the program financed through the purchase of foreign currencies excess to the normal requirements of the United States in accordance with Public Law 83-480, the Agricultural Trade Development and Assistance Act of 1954, as amended. Bureau staff also participated in the annual Seminar for Foreign Service Officers of the Department of State, and in the 10th International Conference of Social Work held in Rome.

A Look Ahead

Public assistance has played an important role in the social security system in assuring needy people the right to live at a level of minimal decency. To the extent the need for this kind of assurance is considered a consequence of a healthy, growing industrial society will the full potential of public welfare measures be utilized in achieving the balanced social and economic development essential to a strong democracy.

Although significant gains have been made in the relatively short history of the Federal-State public assistance programs, tremendous forward strides could be made under a fuller utilization of existing legislative provisions. Other gaps in program provisions require legislative change.

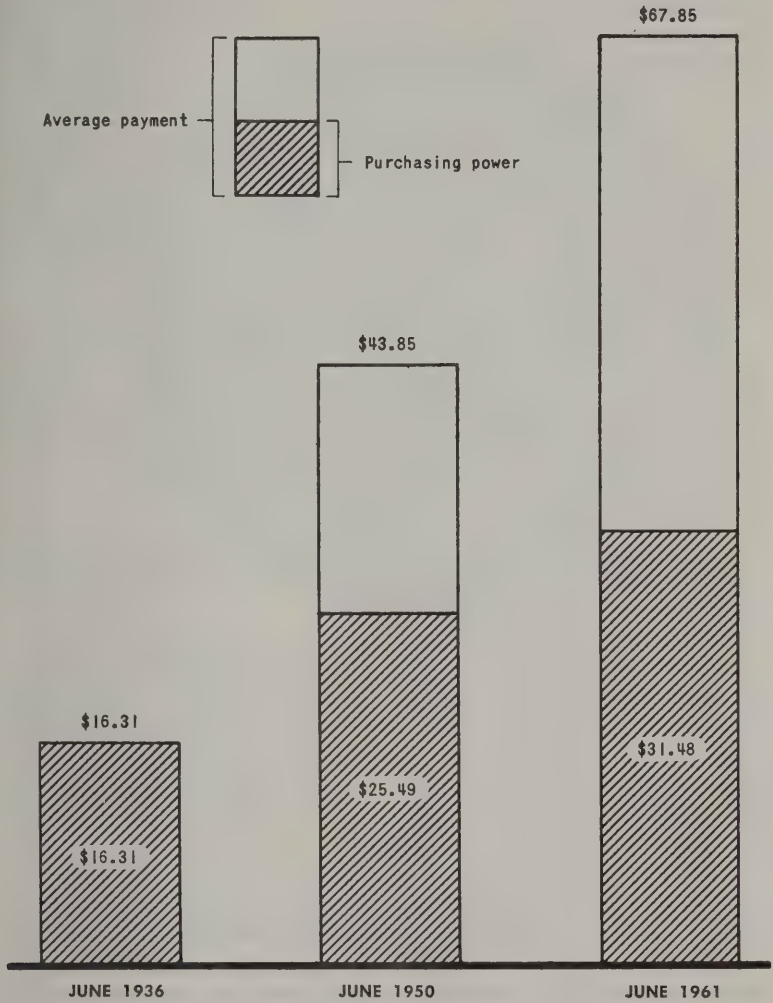
ASSISTANCE PAYMENTS NOT MEETING "NEED"

Although Federal, State, and local governments have substantially increased their expenditures, with rising costs and the shrinking value of the dollar, public assistance payments are not meeting "need" in many instances.

Fewer than half the States are fully meeting "need," judged by standards they themselves have set. (Need is defined here as the gap in income between the total cost of living essentials set by the State and the individual's resources to meet that cost.) The other States either impose maximums on the monthly amount of assistance any individual or family may receive or meet only a specified proportion of need. In some States, the standards themselves are inadequate.

As indicated in chart 4, although the average assistance payment has increased in dollar terms, the increased cost of public assistance in the past 25 years has been due more to monetary inflation than to expansion in the purchasing power of the assistance payment.

CHART 4.—PURCHASING POWER OF AVERAGE OLD-AGE ASSISTANCE PAYMENT. DOLLAR AMOUNTS ARE ADJUSTED FOR CHANGES IN THE BUREAU OF LABOR STATISTICS CONSUMER PRICE INDEX.



INADEQUATE PROVISION TO MEET MEDICAL CARE COSTS

Although recent Federal legislation increased provisions for costs of medical care, and significant gains have already been made in some States, the majority still provide for only limited medical care, and not the broad scope of services needed by most sick people.

NEEDY CHILDREN ARE BEING "SHORT-CHANGED"

Provisions for needy children are not keeping pace with the increased child population. As indicated in Chart 2, about the same proportion of the child population received assistance in 1961 as in 1950; program changes during this period have not resulted in a significant relative increase in the proportion of children receiving aid to dependent children. Inequities between provisions for the needy aged and those for dependent children also highlight the restrictive effect of the attitudes of many toward certain causes of dependency of children such as the socially unacceptable behavior of parents. These inequities also compound the damaging effects on children of serious social problems—dependency, family breakdown, illegitimacy, ill health, and disability.

Chart 5 highlights facts concerning widespread fallacies as to the impact of illegitimacy on the aid to dependent children program. Only *about 1/2 of 1 percent of the total child population are illegitimate and receiving aid to dependent children*, even though about 4 1/2 percent of the Nation's child population are illegitimate.

NEED FOR PREVENTIVE AND REHABILITATIVE SERVICES BY QUALIFIED STAFF

Although the importance of providing other social services by qualified staff is recognized through legislative provisions, many factors hinder their effective implementation.

Because of staff limitations and heavy workloads (e.g., 1 caseworker with full professional training to every 23,000 assistance recipients—see other detailed information in chart 6), the States' services plans, in general, realistically define their responsibility by limiting the problems for which services would be provided, limiting services to those required in the determination of eligibility for money payments, or limiting services to those that could be provided only during regular contacts for eligibility determination.

High caseloads and lack of staff skills also limit the quality of services that can be provided by most agencies, since this kind of help usually needs the knowledge and skill that comes from professional social work training. Provision is also needed for skilled staff services before eligibility for assistance is established, as well as for aiding those who can be helped to utilize their own resources and resources available elsewhere in the community, to prevent their ultimate need for public assistance.

These are but some of the areas that could be strengthened if public assistance measures are to be used as a constructive force in dealing with the many social problems facing our productive and growing

CHART 5.—ILLEGITIMATE CHILDREN RECEIVING AID TO DEPENDENT CHILDREN EQUAL 1/2 OF 1 PERCENT OF ALL CHILDREN

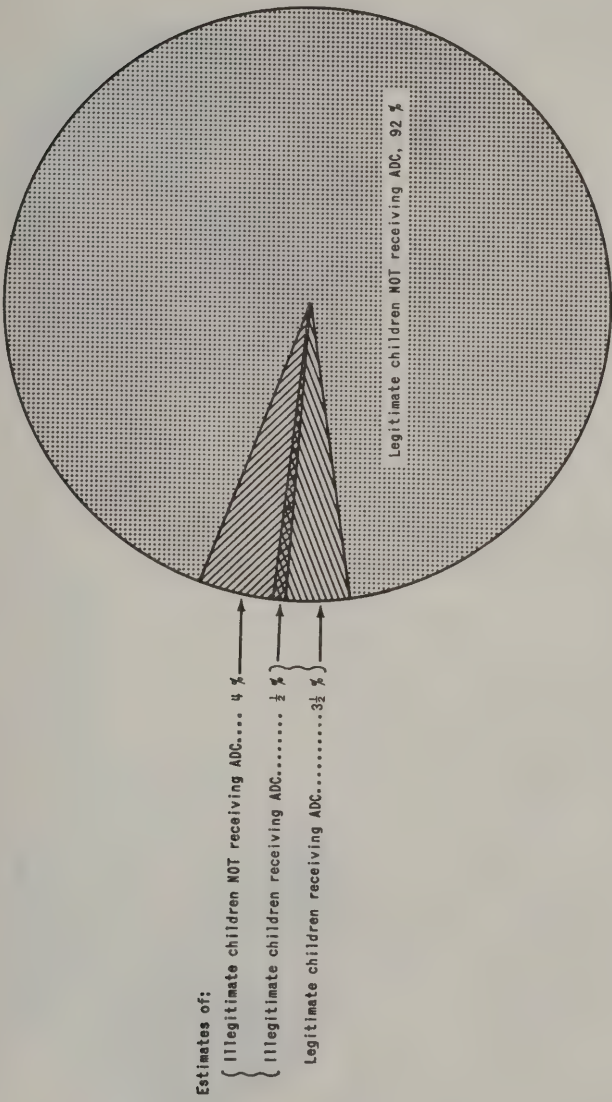
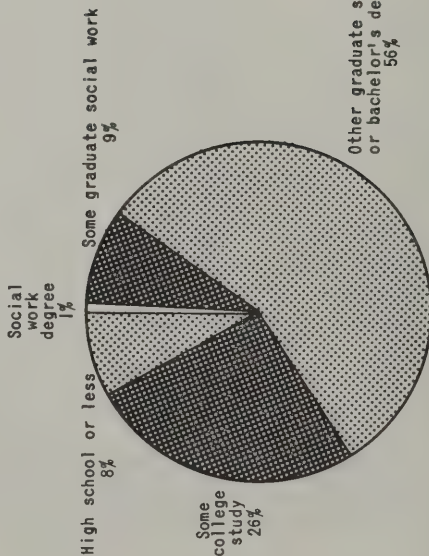


CHART 6.—PUBLIC ASSISTANCE CASEWORKERS,* EARLY 1960

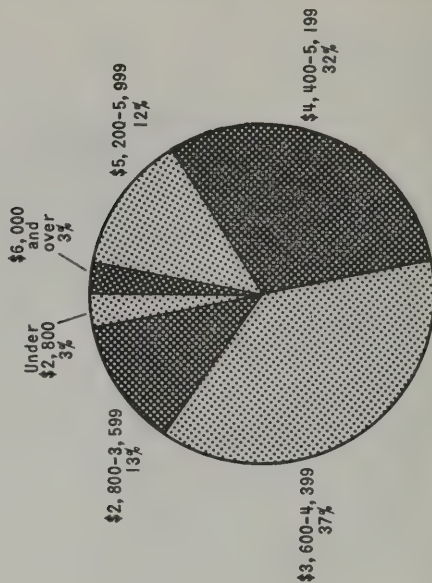
EDUCATION

1 caseworker with full professional training for every 23,000 recipients



SALARY

Median \$4,338



SOURCE: 1960 Survey of Salaries and Working Conditions of Social Welfare Manpower; U.S. Department of Health, Education, and Welfare; Social Security Administration; Bureau of Public Assistance - Children's Bureau, 1961

* Includes caseworkers working on general assistance under State and local programs.

economy. The extent they are used for prevention and rehabilitation, as well as for sustaining life at a level of minimal decency, will determine the degree to which the human resources of the present and future will be conserved. Measures to strengthen the individual and the family are sorely needed today, as never before, to add strength to a nation carrying grave responsibilities of leadership in a world seething with rapid economic and social change.

Children's Bureau

By law and tradition, the Children's Bureau serves the children of the United States and its current program reflects its concern for the well-being of all children.

The legal base for its service is contained in two acts, and in delegations of responsibilities to the Bureau by the Secretary of Health, Education, and Welfare, and by the Commissioner of Social Security.

Under its basic act of 1912, as amended, the Bureau is charged to investigate and report "upon all matters pertaining to the welfare of children and child life among all classes of our people."

Under title V of the Social Security Act, 1935, as amended, the Bureau, by delegation, assists the States through technical and financial aid, in enhancing and protecting the well-being of many children through child health and welfare services.

All of the Bureau's activities are related and interwoven at many points. They reach out beyond the strict borders of social services and health services into many phases of child life that make for or interfere with the development and well-being and normal growth of children in their families, neighborhoods, and communities.

Stemming from these two acts but interwoven into one program are the purposes of the Children's Bureau today :

- to assemble facts that will keep the country informed about children and matters adversely affecting their well-being ;
- to recommend measures that will be effective in advancing the wholesome development of children, and in preventing and treating the ill effects of adverse conditions ;
- to give technical assistance to citizens and to voluntary and public agencies in improving the conditions of childhood ; and
- to administer the financial aid that the Federal Government appropriates each year to aid in building the child health and welfare services for children.

Overall goals for the Nation's children and youth were projected by the 1960 White House Conference on Children and Youth as the basis for national action, public and voluntary, Federal, State, and local for the next 10 years.

The overall goal of the Children's Bureau, reflecting society's concern for its children, is that every child in our Nation have an opportunity for healthy growth, for maximum development of his potentials, and for a productive and satisfying living experience.

The Bureau's focus on the whole child and the health and welfare services he requires for his well-being includes seeing him in his family and community setting and encourages the development of a whole gamut of essential services. The problems of children and youth with which our society is dealing make a multiprofessional approach essential, as for example, in juvenile delinquency, mental retardation, adoption, illegitimacy, foster care, day care, homemaker service, and guides to parents on child rearing.

Though directed to investigate all matters relating to child life, obviously a small agency such as the Children's Bureau (at present its staff numbers less than 250) has to be selective. Over the years, children with disadvantages of many kinds have claimed the major attention of the Bureau. The social, environmental, and health hazards which affect the lives of children and prevent children from reaching their maximum potentials are constantly under review in the Bureau.

Goals then must provide for meeting the needs of increased numbers of children, for continuing the present trends toward better coverage of their needs, dealing effectively with new needs as they arise, and for bringing to services for mothers and children the benefits from new developments in research. Changes taking place in patterns of family and community life are affecting lives of children profoundly.

Among the most significant of these changes is the trend toward urbanization. Two-thirds of our population now live in metropolitan areas. At the same time, financially adequate families, especially those with children, are moving out of the central cities into the suburbs. In many instances, our sprawling metropolitan areas override State and local governmental boundaries and essential services needed by children and families living in these outlying areas have not been developed. The core city, though having authority and structure, is left with reduced resources to deal with a population which has a high proportion of families presenting health and welfare problems.

Family life may be expected to continue to be affected by mobility of our population, by employment changes resulting from automation and mechanization, by rising standards of living, and by a continuing trend toward employment of women outside the home.

Admittedly there are still many gaps in the health and welfare services for children and many aspects of these programs require strengthening and improving.

There are large geographic areas without special types of health and medical care that many mothers and children need and without child welfare workers to help children with family and other social problems.

Great shortages exist in personnel especially trained for work with children. Too few young people are choosing careers in health and welfare services for children. To conserve children's abilities and potentialities, the pool of skilled workers must be expanded substantially.

Needs are pressing for more research into causes and treatment of children's physical, emotional, and social problems. Research and demonstration programs are needed to advance the development of sound programs of service to children and their families.

New patterns of community services for children are an urgent need in order to serve families and children more expeditiously without debasing quality of service.

Many States lack adequate legal protections for children or fail to enforce what protections exist.

During fiscal 1961, the attention of the Department, the Bureau, and State and local agencies was focused on the need to take stock and evaluate health and welfare programs for children.

Much of the impetus for this reevaluation in State and local agencies comes from the 1960 White House Conference on Children and Youth. Present programs are being critically examined and plans are being made to expand the services to meet the needs of our increasing population of children who represent the wealth of our human resources. The Children's Bureau in common with these many agencies and organizations was analyzing its own functions and activities against the backdrop of the Conference. Another event leading to reevaluation was the advent of the new administration which stimulated Government agencies and the country at large to reexamine health and welfare programs generally.

Some Facts and Figures About Parents and Children

Births continue to be more than 4 million a year, but the crude birth rate and the rate per thousand women of child bearing age have dropped slightly since the peak of the 1950's.

The estimated number of children under 18 in the resident population of the United States—50 States and the District of Columbia—in 1960 was 64.2 million, 35.8 percent of the total population.

Provisional statistics indicate that the infant mortality rate for 1960, and the early months of 1961 (25.7 per 1,000 live births), has decreased appreciably from the high point of 27.1 per thousand live

births in 1958. Death rates for babies less than 3 days old have changed very little in the past two decades. Nonwhite infants still have a higher mortality rate than white infants, and the excess is now greater than in 1950.

Numbers, rates, and ratios of births out of wedlock continue to increase. The estimated number for 1959 was 221,000. The ratio per 1,000 live births increased over 1958 from 49.6 to 52 and the rate per 1,000 unmarried women age 15-44 years from 21.0 to 22.1. Forty percent of births out of wedlock in 1959 were to mothers under 20 years of age.

In March 1960, there were 52.4 million married, divorced, and widowed women in the United States, of which almost one-third, or 17.1 million were in the labor force. Of those in the labor force, 5.1 million, or 42.5 percent, had children between the ages of 6 and 17; 2.9 million, or 20.2 percent, had children under 6. The number of working mothers with children under 18 years increased by about 500,000 since March 1958.

In 1960, for the twelfth consecutive year, juvenile court delinquency cases increased over the previous year. The increase for 1960 was 6 percent when traffic cases are excluded. The rise exceeded the 2 percent estimated increase in the child population. Arrest data for 1960 reported by the Federal Bureau of Investigation for 1,614 cities show that the arrests of children under 18 years increased by 9 percent over 1959. Juvenile arrests in rural areas, tabulated by the Federal Bureau of Investigation for the first time in 1960, increased by 8 percent over 1959.

Report to the Congress on Children in Migrant Families

A report entitled *Children in Migrant Families*, prepared by the Children's Bureau at the request of the Senate Appropriations Committee, was transmitted to the Committee by Secretary Flemming on January 19, 1961.

The report summarized information about the conditions, problems, and unmet needs of children in migrant families. It gave particular attention to their needs for health services and for child welfare services, including day care. In preparing this report, the Bureau drew upon material and studies developed by a wide variety of groups. New information, elicited through a schedule submitted to national voluntary organizations and State public health and welfare agencies, was correlated with the Bureau's own experience in working with public, voluntary, and civic agencies and organizations to promote the well-being of children in migrant families.

Although admittedly a wide variety of provisions impinging on or affecting migrant children, such as education, child labor, housing, and sanitation are urgently needed, the recommendations in this report were focused on specific child welfare and child health measures that would contribute to alleviating the adverse conditions of children of migrant workers, especially children of working mothers. The Bureau recommended a program of immediate action, including: (1) Expansion of child welfare services and maternal and child health services so as to make these services readily available and accessible to migrant children and their families; (2) increased technical assistance to agencies and organizations engaged in helping migrant children; (3) increased encouragement of and assistance in research and demonstrations relating to new or improved measures for helping migrant children, in the fields of child welfare and child health; (4) increased investigating and reporting activities relating to the development of effective measures for improving the welfare and health of migrant children; and (5) a nationwide information-education campaign, to acquaint the public with the findings that result from these various activities.

President's Committee on Juvenile Delinquency and Youth Crime

On May 11, 1961, President John F. Kennedy established by Executive Order the President's Committee on Juvenile Delinquency and Youth Crime. This Committee is composed of the Attorney General, the Secretary of Labor, and the Secretary of Health, Education, and Welfare.

The Executive Order states, "The Committee (1) shall review, evaluate and promote the coordination of the activities of the several departments and agencies of the Federal Government relating to juvenile delinquency and youth crime; (2) shall stimulate experimentation, innovation and improvement in Federal programs; (3) shall encourage cooperation and the sharing of information between Federal agencies and State, local and private organizations having similar responsibilities and interests; (4) shall make recommendations to the Federal departments and agencies on measures to make more effective the prevention, treatment, and control of juvenile delinquency and youth crime."

Also on the same date, the President announced the appointment of the Attorney General as chairman of the Committee, and the appointment of David L. Hackett, a special assistant to the Attorney General, as Executive Director of the Committee. The Bureau cooperated with the Committee and provided a substantial amount of staff service to the Committee during the balance of the fiscal year.

Juvenile Delinquency Legislation

On May 11, 1961, President Kennedy transmitted to the Congress an administration proposal for a 5-year program of grants for demonstration and evaluation projects and for training, and of technical assistance services, relating to the prevention and control of juvenile delinquency or youth offenses. As finally passed by both Houses, legislation—which was substantially in accord with the President's recommendations—authorized appropriations for 3 years, beginning with the fiscal year 1962 for grants and technical assistance services. This legislation was approved by President Kennedy on September 22, 1961, and became P.L. 87-273. A supplemental appropriation bill was enacted which provided an appropriation of \$8,200,000, thereby enabling immediate implementation of this new legislation.

Appropriations

The 1962 appropriation request of the Department provided for funds enabling the Bureau to implement two new programs which were authorized by 1960 legislation enacted in the early part of the 1961 fiscal year. The first piece of this legislation was the International Health Research Act. The second piece was contained in the 1960 amendments to the Social Security Act and was an authorization for a new program of grants for research or demonstration projects in the field of child welfare.

As finally approved by the President on September 22, 1961, the 1961 Appropriation Act for the Department not only contained funds for these two new programs, but also contained increases of roughly \$5 million apiece in each of the three programs of grants to the States which are administered by the Bureau. For maternal and child health services and for crippled children's services, respectively, the amount appropriated for the fiscal year 1962 was \$25 million as compared with appropriations of \$18,167,000 and \$20,000,000, respectively, for the fiscal year 1961. These two appropriations for 1962 thereby reached the full amount authorized under the increased ceilings contained in the 1960 Amendments to the Social Security Act. With respect to child welfare services, the amount appropriated for grants to the States for 1962 was \$18,750,000 as compared with \$13,666,000 for 1961.

Federal Interdepartmental Committee on Children and Youth

The work of the Interdepartmental Committee on Children and Youth during fiscal 1961, its 13th year, featured followup on the 1960 White House Conference on Children and Youth. Member agencies

of the Committee analyzed White House Conference recommendations related to their programs to determine those on which they could take action within the framework of their present authority, obligations, policies, and resources. They found that many of the recommendations parallel their ongoing agency activities, and have expanded their services toward achievement of White House Conference objectives in a number of specific instances. These have included conferences and workshops sponsored by member agencies or participated in by such agencies, material developed, published, and disseminated, consultation service given, speeches made, and participation in a variety of activities related to White House Conference goals.

In carrying forward the purposes of the White House Conference, the Interdepartmental Committee on Children and Youth worked closely with the Special Unit for White House Conference Follow Up established in the Office of the Chief of the Children's Bureau on November 1, 1960.

With the assistance of staff of the Special Unit, the Interdepartmental Committee on Children and Youth completed the revision of its publication, *Programs of the Federal Government Affecting Children and Youth*, originally published in 1951.

Four subcommittees of the Interdepartmental Committee were active along the lines of White House Conference recommendations. The Subcommittee on Transition from School to Work developed a report, *Outline for a Work and Service Program for Young Persons 16-21 Years of Age*. This report has been widely used by various groups concerned with the development of programs to provide for youth opportunity for work, training and service. Many of the features of this report were incorporated in the Administration's Youth Employment Opportunities Bill.

The Subcommittee on Juvenile Delinquency stressed the need for more material in popular form to explain the multiple causes of delinquency, for concrete action on preventive programs and for support of appropriations at all levels for basic programs for children.

The Subcommittee on Families and Children of Agricultural Migrants devoted its attention to studying the proposals for legislation affecting migrant workers and their children under consideration in the Congress.

A special subcommittee considered the White House Conference recommendation that a study be made of the effects of the draft law in peacetime on the youth of the Nation and on the Nation. This subcommittee recommended that although such a study was beyond the scope of the Interdepartmental Committee, the Committee might well consider ways of following up on youth rejected for physical and educational reasons. A subcommittee is now at work on proposals along this line.

The Special Unit for White House Conference Follow Up

The Special Unit, financed by a special Congressional appropriation for White House Conference follow up, operated until the end of the fiscal year, June 30.

The purpose of the Special Unit was two-fold: (1) to stimulate and reinforce activities by other agencies, organizations, and groups to achieve White House Conference objectives, and (2) to interweave White House Conference philosophy, materials, and forward viewpoint into ongoing substantive programs of the Federal agencies both at Washington headquarters and in regional offices. To carry forward this purpose, the Special Unit worked along five major lines: (1) regional workshops; (2) consultation service to regional representatives of Federal agencies, and, upon request, to State Committees for Children and Youth and others; (3) preparation and dissemination of new material; (4) acquisition and distribution of material prepared by others; (5) cooperative activities with the Interdepartmental Committee on Children and Youth and the National Committee for Children and Youth.

Five special consultants, a principal consultant from the Washington office, and four consultants assigned to regional offices in Boston, Dallas, New York, and San Francisco, devoted their major attention to developing methods of assisting State committees for children and youth and to open and broaden channels through which information and services can flow from various Federal agencies and national organizations in the regions to State committees.

Partly as a result of this consultation service, several regional interdepartmental committees on children and youth may be established; a meeting of the first one, in San Francisco, is scheduled for September.

The National Workshop on Consultation to State Committees, sponsored by the Children's Bureau in October 1960, was followed in the spring of 1961 by four regional workshops in San Francisco, Chicago, Oklahoma City, and Boston.

In cooperation with the Division of Reports, six new publications were projected—*Youth Today—Tomorrow's Adults*, *The Lebanon Story*, and four pamphlets comprising the Headliner Series by Margaret Mead, Walt Kelly, Margaret Hickey, and Edgar Friedenburg. Three of these were in the process of being printed at the close of the fiscal year.

The Special Unit enabled the Interdepartmental Committee on Children and Youth to expand greatly its continuing service in mailing selected publications to State Committees for Children and Youth.

Some 450 pieces of material from Federal agencies, national organizations, and State and local agencies and organizations were supplied to State committees.

The Special Unit and the Interdepartmental Committee on Children and Youth also maintained close working relationships with the National Committee for Children and Youth. This included sharing of information, reports, and materials of mutual interest; participation by the Executive Director of the National Committee for Children and Youth in the Interdepartmental Committee on Children and Youth meetings; and joint participation in various special conferences.

The addition of a consultant for fiscal year 1962 for community planning will enable the Bureau with the assistance of its regional staff to give limited consultation services to State committees and to regional representatives of other Federal agencies in furthering objectives of the States for children and youth.

Programs of the Bureau

RESEARCH IN CHILD LIFE

The Bureau's research staff has a major responsibility for carrying out the legislative mandate "to investigate and report upon all matters pertaining to the welfare of children." In addition to its own studies and cooperating in joint studies, the Bureau stimulates other agencies to undertake research in child life by formulating questions needing study, developing research methods, and providing technical assistance.

Technical Research

Some of the technical research studies conducted by the Bureau follow:

1. Cultural Studies of Youth

The pilot anthropological study of American youth culture has completed its first data-gathering stage in St. Louis. Material from interviews, observation, and questionnaires has been brought back to Washington for analysis. Meanwhile plans are underway for drawing on the experience of the pilot study to design a number of larger studies in other centers.

2. Study of Cystic Fibrosis

Studies directed toward determining the incidence and prevalence of cystic fibrosis, conducted in collaboration with the National Office of Vital Statistics and under contract with the Institute of Allergy and Infectious Diseases, continue.

The first of these studies, initiated at the end of the calendar year 1958, provided national estimates of the number of hospitalized cases

of cystic fibrosis, the number of discharges, and the number of deaths in hospitals resulting from the disease for each year, 1952 through 1957. A report of findings was published in the September 1, 1959, issue of *Public Health Reports*. A supplementary final report on demographic characteristics of patients hospitalized because of the disease in 1957 was published in the July 1961 issue of *Pediatrics*.

In order to develop and test procedures for making a national study of the incidence and prevalence of the disease, a pilot survey of cases in Massachusetts, New Hampshire, and Vermont was made.

A preliminary analysis of findings revealed that during the period 1952-58, inclusive, approximately 650 children residing in the pilot area were known to have cystic fibrosis. Based on cohorts of children born during each of those years, the incidence rate for the disease was estimated to be about 42 per 100,000 live births or 1 in 2,300.

3. Outcome of Independent Adoptions in Florida

This study was conducted jointly by the Florida Department of Welfare and the Children's Bureau and was financed by the Russell Sage Foundation. Findings concern the kind of homes found for the children, the way the children seem to be getting along, and the characteristics or conditions that seem to be associated with favorable or unfavorable adoption outcomes. The report will be published in book form by the Russell Sage Foundation in 1962.

4. Trends in Infant Mortality

Studies on infant mortality trends in the United States since 1950 were carried forward. Three articles were published: "Recent Trends in Infant Mortality in the United States (1950-1957)" in the February 1961 issue of the *American Journal of Public Health*; an account of current trends in the November-December 1960 issue of *Children*; and a study of current problems in perinatal and maternal mortality reported in the *Bulletin of the National Association of Maternal and Infant Health*.

Infant mortality in 1960 and in the first quarter of 1961 continued to be elevated about 5 percent above the level expected on the basis of trends established during 1950-57. Currently the postneonatal mortality rate (1-11 months) is showing greater departure from expected levels in 1960 and 1961 than the neonatal rate (under 28 days).

5. Children Who Receive Services from Public Child Welfare Agencies

Published under the above title, this report (Children's Bureau Publication No. 387) deals with the first study of the characteristics of these children made by the Children's Bureau since 1945. This was a study of 220,812 children in 45 States. In addition to data on age, sex, color, marital status, and living arrangements, the study

yielded some facts about agency practices and length of service to children.

6. National Survey of Social Welfare Manpower in 1960

A preliminary report has been issued jointly by the Children's Bureau and the Bureau of Public Assistance on the National Survey of Social Welfare Manpower which the Department conducted in 1960 in cooperation with the National Social Welfare Assembly and the Bureau of Labor Statistics. The Department's part of this survey was planned by a working group set up by the Office of the Secretary, composed of representatives of the Children's Bureau, Bureau of Public Assistance, the Office of Vocational Rehabilitation, and the Public Health Service. The Department's survey covered all social welfare personnel in the Department and in State and local public welfare agencies administering programs for which the Department carries Federal responsibility, except those engaged in vocational rehabilitation.

Statistical Reports

During the year, the Bureau compiled and published current statistical data received from State agencies administering the maternal and child health, crippled children's and child welfare programs. It also published statistical data on children who receive services from public child welfare agencies, adoptions, the Cuban refugee program, licensed day-care facilities, juvenile court statistics, statistics from public institutions for delinquent children, staff losses in child welfare and family service agencies, recent trends in public child welfare personnel, distribution of personnel and expenditures, and organization for public child welfare services. A number of revisions of the Bureau's statistical reporting were underway.

Research Interpretation

As part of its research interpretation, the Bureau completely rewrote and had in press at the end of the fiscal year two of its major publications—*Your Child from One to Six* and *Prenatal Care*. Bulletins were printed and distributed by the Clearinghouse for Research in Child Life.

Consultation and Conferences

The research staff worked with or gave consultation requested by State health and welfare departments, national organizations, and universities on such subjects as evaluation of programs, delinquency statistics and studies, statistics and studies in child welfare, planning

health surveys, shortages of research manpower and what to do about it, parent education and family life.

A number of conferences on various aspects of research was planned by or participated in by the Children's Bureau research staff. Notable among these were the following:

1. Conference on Research in Child Welfare

At the invitation of the Chief of the Children's Bureau, 21 experts in research and practice in the field of child welfare met in Washington on December 15 and 16, 1960, to discuss various aspects of the recent amendment to Title V of the Social Security Act authorizing grants for research or demonstration projects in child welfare. The discussion included the role of the Children's Bureau, methods of regional participation, definitions of research and demonstration, grants for research planning and exploratory research, consultation on design, continuity of research, research in an operating agency, research personnel, and priorities in subject matter of research.

A report of this conference has been published (Children's Bureau Publication No. 389, *Research in Child Welfare*).

2. Conference on State Research and Statistical Personnel

The biennial conference of research and statistical personnel of State departments of public welfare sponsored jointly by the Bureau of Public Assistance and the Children's Bureau was held in Denver, Colo., September 26-30, 1960. Representatives of 38 States attended.

3. Conference on Juvenile Delinquency Research

The Division called a 1-day conference on delinquency research at which Professor D. H. Stott, Department of Psychology, University of Glasgow, presented findings from his research on the prediction of children's social adjustment in general and of delinquency in particular.

MATERNAL AND CHILD HEALTH SERVICES

All States, the District of Columbia, Puerto Rico, the Virgin Islands, and Guam received Federal funds to improve services for promoting the health of mothers and children.

For the fiscal year 1961, the appropriation for maternal and child health increased to \$18,167,000 with \$1,000,000 earmarked for services to mentally retarded children.

Because the great bulk of infant deaths now occur very early in the first year of life, more than one-third on the first day, approximately half in the first 3 days, 9 out of 10 in the first 5 months, and because nearly 3 times as many deaths are due to prenatal and natal causes as to postnatal causes, major efforts are being directed toward services to the mother *before* the birth of her child. Prenatal services

are being extended especially to population groups where great need for public services exists in both urban and rural communities.

The problems of urban mothers and children receiving maternal and child health services are becoming analogous to those living in rural areas: the ratio of services to population is a decreasing one; services are not always acceptable for cultural, financial, educational, geographic, and, no doubt, other reasons.

The increasing need for public prenatal services, the lack of progress in preventing prematurity and congenital anomalies, the question of why patients do not seek or accept prenatal care are being explored. Examples of such activities are: the medical-social project for unwed mothers and their babies in Hartford, Conn.; the studies of deterrents to prenatal care particularly in the young unmarried mother in New York City; the Philadelphia Health Department study of deterrents to utilization of prenatal care services.

Cooperative ventures in providing services locally involving health, welfare, and other agencies such as county hospitals are increasing in number. Striking examples are noted in Imperial, Madera, and San Mateo Counties in California, and Thurston County, Wash.

Interestingly, in contrast to the prominence of large metropolitan area health problems but probably also part of the changing composition of the population in our large cities, as well as the continuing rural and semirural health needs, is the interest in decentralization of services. For example, in Connecticut, plans are underway for small residential institutions for the mentally retarded to be located in various communities throughout the State. In California, local health department clinics for mentally retarded children are being established with consultation from a central clinic in a university center. In Pennsylvania, the first regional maternal and child health director has been appointed to carry out program administration and planning for the State health department's regional office.

The interest in the evaluation of program activities continues. For example, in Washington and California, studies are being designed to determine the effectiveness of children's services. Oregon is exploring methods of evaluating local health services in general. Arizona has a small study of maternal and child health services underway in one county concerned primarily with efficiency.

The rapid increase in the school-age population in both elementary and secondary schools is causing educators and health personnel to review critically their current health programs. Service demands have multiplied not only in amount but in scope and in depth.

Problems of emotionally disturbed children are receiving considerable attention in State maternal and child health programs. In Florida and South Carolina, maternal and child health directors are

participating on committees whose objectives include development of services for these children. In connection with two medical schools, Emory and Vanderbilt Universities, new psychiatric facilities for children have recently been opened. In both, the primary objective is training of professional staff.

Agencies are reporting increasing demands for maternal and child health and crippled children's services in midwestern States because of greater unemployment, which is partly due to the shift of unskilled laborers from rural to urban areas, and also due to continued drought and crop failure. Several States as a result are receiving requests for additional well child conferences and prenatal clinics.

Complete maternity care for medically indigent maternity patients in depressed areas of West Virginia has increased from two to seven areas. Two hundred and sixty patients were delivered without a fatality though the majority were considered a high-risk group. Public health nursing service, referrals of infants for well child supervision, consultation by a district nutritionist and by a maternity nursing consultant have been part of the demonstration.

The first national meeting on adolescent medicine was held in Denver in April. The 75 participants included pediatricians, internists, psychiatrists, nurses, nutritionists, social workers, and psychologists, who discussed the needs of the adolescent and how these can be met. The principal concern was the large proportion of youngsters who came to the clinics because of school failure, reading problems, psychosomatic complaints, and other indications of emotional maladaptation.

During fiscal 1961 the special services rendered to mentally retarded children and their families by State health departments continued to increase. A summary of the report of services provided by 38 States is as follows:

	<i>Item</i>	<i>Number</i>	<i>Average per State</i>
Applications:			
	Total handled this year.....	6,485	171
	New	8,054	212
	Carried over to next year.....	1,646	43
Cases:			
	Total admitted this year.....	5,747	151
	Total served.....	10,644	280
	Carried over to next year.....	6,404	169

Age Distribution of New Cases

	<i>Item</i>	<i>Number</i>	<i>Percent</i>
Age Group.			
	Total ¹	5,646	100.0
	Under 1 year.....	138	2.4
	1-4 years.....	1,787	31.7
	5-9 years.....	2,432	43.1
	10-14 years.....	981	17.4
	15-20 years.....	308	5.4

¹ Excluded cases for which age was not stated.

This is a 32-percent increase in new applications and approximately a 20-percent increase in the total number of cases served. The number of children requiring continuing services showed an 80-percent increase over 1958.

Efforts to reach more new cases and to spread the services and consultation available through these services are evident through such new developments as:

1. *New mental retardation clinics have been established.*—A new consultation and evaluation clinic in the Children's Hospital of Louisville, Ky., despite rapid expansion, had 50 children on the waiting list by June. In April, a new mental retardation clinic opened for service in Columbia, S.C.

2. *Greater geographic coverage has been achieved.*—For example, in Georgia, the special project area had been expanded from three to six counties; in Alabama, the special project is offering consultation and some clinic services statewide.

3. *New approaches are underway.*—The California special project clinical team at Children's Hospital, Los Angeles, is successfully training local health department staffs to carry out services independently. The Connecticut Community Program for Retarded Children has developed activities of diagnostic and counseling services for young children, community planning and education of professional and lay groups.

4. *Critical evaluation of the program is underway in a number of States.*—For example, the Maine mental retardation clinic has reported on its first 3 years of experience. Since the percentage of severely retarded declined each year, the possibility of habilitation is greater.

5. *Training activities have been undertaken in many States.*—For example, the Florida State Board of Health, through the Dade County Developmental Evaluation Clinic, was host to the first National Workshop for Social Workers in Mental Retardation Projects held at Miami Beach, Fla., April 4-7, 1961.

Some 26 States have set up programs to detect and treat phenylketonuria—an inherited metabolic disorder associated with mental retardation. More than 25 infants with this condition were detected the past year and placed under treatment for prevention of mental retardation. For example, Michigan has had a program of casefinding, diagnosis, and treatment of PKU. In Indiana, legislation has been passed which requires the State Board of Health to carry out an educational program for physicians, nurses, hospitals, and the public on phenylketonuria. To implement this legislation, 10,000 copies of the Children's Bureau pamphlet *Phenylketonuria* have been purchased for distribution to all physicians and hospitals. In Region

III, all States except North Carolina have adopted a test for the detection of phenylketonuria in the well-child and pediatric services.

CRIPPLED CHILDREN'S SERVICES

All the States (excepting Arizona), the District of Columbia, Puerto Rico, the Virgin Islands, and Guam are participating in the crippled children's programs. Although the State agency auspices vary, the objective is uniform; namely, to locate children who require care and to provide restoration through diagnosis, medical and surgical treatment, and alleviation of unfavorable social and psychological influences which adversely affect the degree and duration of the disability. The appropriation for crippled children's services in fiscal 1961 was \$20 million.

State crippled children's programs throughout the country provided care to 339,000 children in 1959 with many different impairments. For every 1,000 children under 21 years of age in the general population, 4.9 children were under care in crippled children's programs.

Children with other than orthopedic defects now constitute the largest group in the crippled children's programs. Although the actual number of children with orthopedic defects has not declined, each year the States broaden their programs to include other handicapping conditions such as cystic fibrosis, nephrosis, epilepsy, hearing, and certain neurological defects.

A new pilot program designed to reduce the high mortality of infants born with congenital defects incompatible with life has been established at the Children's Hospital in Philadelphia with special Children's Bureau funds. The unit has highly trained staff and is patterned after a similar facility in Liverpool, England, which has proved the life-saving value of prompt, experienced surgical correction and intensive pre- and post-surgical nursing and medical care.

Among the nonorthopedic diagnoses reported by State agencies to the Children's Bureau, congenital malformations of the circulatory system have shown a striking increase, attributable in large measure to the significant advances in heart surgery in recent years. From a little more than 2,200 children with congenital heart disease served in 1950, the number has grown to 14,450 by the close of the decade.

Each year additional States develop their own facilities with specially trained personnel for the care of their own children with congenital heart defects. For example, Hawaii engaged a team from the University of Minnesota to review the diagnostic and treatment services available for children with congenital heart disease. The team advised that the diagnostic services needed strengthening but that treatment, including open heart surgery, appeared to be satisfactory. Washington has further developed its program. The Cali-

fornia Regional Congenital Heart Project was adjusted during the year to permit acceptance of children from American Samoa.

The trend toward developing services for the multiply handicapped and for children with various handicaps continues. The increasing acceptance of treatment of the child rather than his disorder, the large number of children in mental retardation clinics with additional handicaps, the shortage of trained personnel and funds to staff specialized clinics, and the increasing knowledge about neurological disorders contribute to the consolidation of services and the application of multidisciplinary services. The trend is particularly evident in Pennsylvania, Kansas, New York, Maryland, Maine, and Connecticut.

While States continue to expand their services in hearing conservation for the school-age population, there is an especially marked increase in interest in screening procedures for the infant and preschool child. Institutes are being planned to instruct health personnel in nonaudiometric screening techniques. Tape recorded tests have been devised to conduct screening at the ages of 3 and 4.

For example, the Alaska study of prevention of hearing loss by control of chronic otitis media has been completed. The Alaska speech and hearing consultant has drafted a manual on hearing testing to be used primarily with nurses and will conduct training workshops for them. This is part of the effort to extend service to areas in the State beyond southeast where most of the program activity has been concentrated to date.

Colorado and Oregon have produced films for both lay and professional viewers on their hearing conservation work. As part of a hearing conservation project in Hawaii, a study of etiology is underway in Oahu.

A statewide clinic for children who have a marked hearing impairment has been established in Atlanta, Ga., for children referred from the regular crippled children's clinics; a team of otologist, speech therapist, audiologist, psychologist, and public health nurse participate. The clinic is held at the Atlanta Speech School where various services are available on a fee basis. The program plans to develop similar diagnostic clinics in two centers as funds and clinical resources become available. Hearing aids are now being provided on a limited basis.

Maryland has initiated a program of dental treatment for physically handicapped and mentally retarded children at the Children's Hospital in Baltimore. Diagnostic treatment, and follow-up services for children on an out-patient as well as in-patient basis are provided.

Federal and State staff continue to participate in conferences, workshops, and other forms of training. The following are examples:

A biregional institute on Neurologically Handicapping Conditions in Children was sponsored by the University of California, School

of Public Health and the California Department of Public Health, and financed by a special grant from the Children's Bureau.

The Children's Bureau Division of Health Services, in cooperation with the Georgia Department of Public Health, sponsored a regional meeting of personnel working in crippled children's programs. A variety of diagnostic and administrative problems was discussed in both general and group sessions.

A regional conference on hearing conservation was held in Elizabethtown, Ky., to provide inservice training for public health nurses and health officers.

A biregional conference of maternal and child health and crippled children's staffs of the 10 States in Regions I and II was held to promote professional communication among these geographically selected States. Four service areas were of particular interest: cystic fibrosis, phenylketonuria, multiple handicaps, and hospital consultation.

CHILD WELFARE SERVICES

Fiscal year 1961 brought new opportunities—and new challenges—to the Bureau in the field of child welfare. The authorization for these services was raised to a new high and in addition, new research and demonstration grants in child welfare were authorized by the 1960 amendments to Title V, Part 3.

RESEARCH AND DEMONSTRATION PROJECTS IN CHILD WELFARE

General plans for the administration of this program have been set up. The 1962 Departmental appropriation bill provides \$350,000 for research and demonstration projects in child welfare.

As a first step in implementing this program, 21 nationally known research and program consultants met with Children's Bureau staff in December 1960 to consider areas of child welfare needing research and demonstration, methods of developing worthwhile projects, and priorities to be considered.

Priorities were urged in such broad subject matter fields as removal of children from their homes, juvenile delinquency, administration and organization of child welfare services, information to strengthen direct services to children at the local level, and criteria for decision making in services for children. Participants indicated that great weight should be given to studies of the whole process of the "child removed from home." The group stated its conviction that the Children's Bureau has a strong role of leadership, stimulation, and coordination in this new program.

FINANCING CHILD WELFARE PROGRAMS

Major developments in the Federal grant-in-aid program for child welfare services during fiscal 1961 included:

1. An increase in the appropriation to \$13,666,000—\$666,000 over the amount appropriated for the fiscal year 1960.

2. Only a minimum amount left as balance in the Federal Treasury (0.4 percent), with a record set in the amount paid out to the States of the total appropriation. This balance represents an all-time low.

3. The amount of \$64,467 released by two States (Guam \$52,467 and Idaho \$12,000) and reallocated to 23 States on February 6, 1961. The amounts so reallocated ranged from \$413.00 (Vermont) to \$9,864 (New York).

4. Participation of Guam in the program the last quarter of fiscal 1961. Even though the beginning child welfare program is limited, a start has been made, with promise of future expansion.

State legislatures in most areas of the country have provided some increases in appropriations for operating the child welfare program this past year. Most of these State funds continue to be absorbed in meeting the costs of the regular, on-going programs however.

PERSONNEL

The 1960 study on *Salaries and Working Conditions of Social Welfare Manpower* provides current information on the 116,000 workers in welfare, health, rehabilitation and recreation settings in governmental and voluntary agencies. Personnel in child welfare programs, in which large employment increases over 1950 were recorded, accounted for 21 percent of these workers. Over the 10-year period, child welfare employees in professional social work positions increased 74 percent. This represented a rise in numbers from 4,163 in 1950 to 7,264 in 1960.

The number of employees with full professional education working primarily in public child welfare programs more than doubled in the decade—from 820 in 1950 to 1,881 in 1960. In 1960, 26 percent of all employees had full professional social work education as compared with 19.7 percent in 1950. But this increase by no means kept abreast of the increase in need for services with the result that the proportion of employees with *no* graduate education in social work rose to 46.2 percent as contrasted with 39.9 percent in 1950.

Salaries rose 68 percent in the decade. In 1960, one caseworker in four received an annual salary of \$5,200 or more. Professional social workers are still at a competitive disadvantage with other professional groups in the public services.

The need for qualified personnel continues to be acute. Gains have been made in the proportion of trained staff in administrative, con-

sultative, and supervisory positions; a smaller proportion of trained child welfare workers are found at the local level.

Stipends for educational leave have been the chief means used by the States of increasing the proportion of supervisors with full professional training. Many States have not been able to provide enough stipends for educational leave to maintain a total staff of trained workers. Expansion of services and coverage in most areas of the country has only been possible through the addition of workers without training. States are taking steps to face this situation realistically through expanded educational leave and in-service training opportunities and efforts to improve the existing bases for staff assignments.

LEGISLATION

The Children's Bureau's new legislative guides on termination of parental rights and responsibilities and the adoption of children were completed during this fiscal year. In preliminary form, copies were distributed to all State welfare departments and to a limited number of voluntary agencies. These guides are now at the Government Printing Office and printed copies will be available shortly.

In addition to the September national ad hoc meeting on the new guide material, two legislative workshops were held. One in Atlanta with the six States participating together with representatives of the Office of General Counsel and the Children's Bureau, the other in San Francisco and participants included representatives from eight States. State representatives included staff members from State attorney general offices.

Many of the States and certain voluntary groups are already using these guides in studying, developing, and drafting proposals for improving present adoption laws; for consultation and advisory service to State and local officials, commissions and agency boards; and in developing and improving official State and local manuals in this important area.

PROGRAM REVIEW AND ASSESSMENT

A number of separate developments seem to forecast a critical "new look" at child welfare and welfare programs in general.

These developments have many dimensions and stem from numerous sources. Some of them include:

1. The increasing costs of programs and the inadequacies of State and local public and voluntary financing.
2. No appreciable gain in closing the gap between mounting needs and resources.
3. Critical reappraisal of practices in certain areas which in turn affect the structure for administering services.

4. A resurgence of interest on the part of citizens in the needs of children, and how they are being met, attributable to the 1960 White House Conference on Children and Youth.

5. Increasing availability of research funds from foundation and governmental sources.

6. Steps to develop, refine, and adapt cost analysis and work measurement techniques to the social service field.

7. Continuous stimulation given by Bureau specialists and regional staff to attain more positive direction and leadership at the State level. The role of the national voluntary agencies should be recognized here also.

Review of current practice this fiscal year has been directed primarily to foster care. State agencies are trying to improve administrative policies and practices, after having some type of review of their children in foster care.

CHILD WELFARE SERVICES IN SPECIAL AREAS

The continued pressure for providing services to children in foster care and adoption, along with limited staff resources has continued to deter any marked development of basic services for children in their own homes.

In those States which have initiated a "suitable home" provision in their ADC programs, child welfare staff have worked closely with the public assistance personnel to encourage policy which will reflect adequate protections for families and children.

The relationship between the two programs has been thrown into sharp focus with passage of Federal legislation authorizing a limited program of foster care (effective May 1, 1961-June 30, 1962) for children receiving ADC who are removed from their own homes by a court of competent jurisdiction because they lacked proper care and protection. The amendment also provides that States choosing to come under this program shall use to the maximum extent practicable staff in the child welfare program.

A joint Children's Bureau-Public Assistance committee was appointed to work on policies and procedures to implement the new amendment. The draft material was reviewed and discussed by a selected group of State administrators, public assistance and child welfare directors. Regional and central office staff of both Bureaus met together in Washington on June 27-28 to consider the draft material developed by the work group. The protection of children and their families was the paramount concern and interest of everyone participating in these two days of meetings.

The plight of young children in families seeking divorce and a growing realization of the importance of strengthening and preserving

family life have spurred greater interest in court counseling services. Both Colorado and Maine have expanded such services after successful demonstration project phases.

Establishment of new homemaker programs under public aegis this year has also been primarily on a pilot basis. It is encouraging that where such services have been established, agencies have been successful in demonstrating their value. For example 25 homemakers are now employed under the public program in nine counties in Colorado. The Knox County, Tenn., homemaker service is looking forward to expansion and the Tennessee department plans to establish a similar service in Memphis.

On the national level, the Advisory Committee to the National Committee on Homemaker Service on which the Children's Bureau has a representative, has developed a detailed plan for an ongoing national mechanism for promoting homemaker service. The National Health Council and the National Social Welfare Assembly are the agencies responsible for seeking foundation funds to support a new independent national homemaker organization. Three hundred and ninety thousand dollars is being requested for a 5-year experimentation period. It is expected that after two years, the amount needed from foundations will decrease as provision for member agency fees, individual fees, and the like is made.

The report of the National Conference on Day Care for Children (November 17-18, 1960) is completed and will be distributed in the early fall of 1961. The report is a compilation of the speeches, discussion groups, content, and recommendations made by the Conference.

All the regions report that much interest was generated "back home" by the Conference. A genuine awakening seems to be occurring in many communities as to the seriousness of the needs in this area. Lack of public financing to underpin the service remains one of the major blocks to any real establishment of day-care programs.

"Children of Change," the film on day care produced jointly by the Pennsylvania State Department of Public Welfare and the Children's Bureau for the national conference, has been used effectively for community group discussions.

With few exceptions a regional roundup shows that major State activity this year was devoted to improving licensing functions rather than initiation of new day-care programs by way of facilities.

The publication of *Deterrents to Early Prenatal Care and Social Services Among Women Pregnant Out of Wedlock*, a New York State Department of Social Welfare Study made with the use of Federal child welfare services funds in cooperation with the Community Council of Greater New York, was an important development in the area of services to unmarried mothers. This survey is a first

phase of a larger research demonstration project, with the second phase to deal with the development of "reaching out" techniques to overcome the obstacles to obtaining social services and early prenatal care.

The major reason for failure for the unmarried mother to use available social agencies for guidance and aid is that they see no need to do so. Only one-fifth seek help from a social agency in making plans for the baby. The majority of white mothers expect to place the babies for adoption, but 87 percent of Negro unmarried mothers and 94 percent of unmarried Puerto Rican mothers plan to keep their babies.

This and other studies show that social, medical and legal resources for services to unmarried mothers remain inadequate. Although voluntary and public welfare agencies indicate that services are available, they are often limited to community residents and to adoptive services for the baby. Funds are generally lacking for maternity home care, making it possible for individuals to arrange for hospital and medical care in return for adoptive placement of the child.

An interesting trend seems to be developing with respect to the "demand" for children for adoption. For the last decade, the trend in the number of adoptions has been steadily upward. The estimated number of adoptions reached 102,000 in 1959. From opposite ends of the country, and from both public and voluntary agencies, information comes of a considerable decrease in the number of adoptive applicants.

This decrease in adoptive applicants is being attributed variously to economic trends, world tensions, increased medical knowledge regarding fertility, and public impatience with long waiting lists. One of the natural results of the decrease in applications and an increase in the number of children available for placement has been a shortening of the waiting period.

The improvement of specific adoption services, including adequate legislation, is seen as an important goal by States. Many States seem to be unaware of the interrelatedness of one service area with other program areas, however, nor do they appear to recognize the importance of this element in planning for improved services. Very little work has been done, for example, in exploring the situations of children with families, who are given up for adoption.

In the field of unprotected adoptions, the California State Department of Social Welfare study of black market operations with particular emphasis on interstate rings, has driven home how far we are from correcting the root causes for this situation. Practices harmful to the welfare of children and against sound public policy were revealed, such as traffic in babies; attorneys and doctors placing children in violation of State laws; fees ranging from \$3,000-\$7,500; and

advertising for mothers who would release their babies for adoption. Strengthened adoption legislation in at least one State is attributed to the California investigation which was partially financed through Federal child welfare services funds.

Greater public awareness of the extent of the need for facilities for mentally retarded children (sparked by parental demands for improved services) has resulted in expanded residential facilities. Information available within the past year indicates that the number of State institutions in the United States has increased in the past three years from 99 to 111. The number of known private institutions has more than doubled—from 182 to nearly 400.⁶

Studies in various States indicate, however, that the addition of new facilities has not served to reduce the size of waiting lists, and that in many instances States have outstripped their fiscal capacity to build more institutions. These developments have focused attention on the need for more selective criteria in admissions, stepped up placement programs and expanded community services in foster family care, group day care, and other social services.

A number of States are reexamining their standards and licensing procedures relative to residential and day-care facilities for retarded children. In the main, these resources are sponsored by commercial interests or parent associations. Many facilities are substandard or in some instances exempt from licensing. This has led to the formulation of new standards, in which the Bureau's specialist in this area and some of the regional child welfare representatives have participated.

The Bureau has continued to work with national organizations, State agencies, and schools of social work in regard to training and education in mental retardation.

In line with the objective of enriching the curriculum of schools of social work with content on mental retardation, emphasis has been given to the development of case records and other teaching material.

Immigration of Cuban citizens and unattached children has become a problem of huge proportions in Miami, Florida. At the end of June, there were 657 unaccompanied Cuban children in foster care; 198 in the Miami area and 459 in 33 communities in 19 States. The vast majority of the children were under care of Catholic agencies. The Florida State Department of Public Welfare agreed to be the agent for the Department of Health, Education, and Welfare in planning for these children and in the use of Federal funds for their care. The administrative task is a very heavy one and the Florida State Department of Public Welfare has contributed an outstanding serv-

⁶ Based on statistics collected by the National Institute of Mental Health (1959), and the 1960 American Association on Mental Deficiency Directory.

ice to the Nation in arranging care for these Cuban children. The Children's Bureau staff from both its central office and regional office has spent considerable time in consultation, both in the early planning for the program and now with the States where the children are being placed.

The Bureau has participated in the development of the Emergency Welfare Service Program by preparing guides and material on *Care and Protection of Children* as a part of the Emergency Social Services document. The report by Dunlap and Associates on *Protection of Institutionalized Population Against Fall Out*, which included five institutions for children, has been reviewed and changes recommended. Staff is also assisting in the development of a handbook for superintendents of welfare institutions, *Civil Defense Emergency Planning in Welfare Institutions*, related to the findings of the Dunlap Study.

Five Emergency Welfare Services regional or biregional meetings were held; one purpose of the meetings was to introduce to the States the basic document *Emergency Welfare Services—Guidelines and Structure* and its *Supplement A: Fiscal Policies and Federal-State Agreements*.

JUVENILE DELINQUENCY SERVICE

During the last half of the fiscal year, the Bureau's staff spent a great deal of time meeting with officials of the President's Committee on Juvenile Delinquency and Youth Crime, in securing and developing information for use by this Committee, and in developing the Administration's legislative program in the field of juvenile delinquency.

Juvenile delinquency continues to be a subject of great public interest and concern. Both Congress and State Legislatures were active.

State Legislation

The trend to the "get tough" attitude continued. In at least three States, bills were introduced to lower the juvenile court age. In one, a bill was introduced to raise it from 16 years to 18 years. Apparently none of these bills were passed.

In at least five States, bills were introduced which would have opened delinquency hearings to the public and permitted publications of names; in two of these jurisdictions, the bills were voted down, in three no action was taken.

Legislation imposing a financial liability on parents for the delinquent acts of children was introduced in at least six States; one law was passed but vetoed by the Governor, two laws were not passed,

and as far as it is known, no action was taken on the rest. About one-third of the States have now passed such laws. As far as is known, none of them have been tested as to constitutionality even though serious questions have been raised as to their legality and social desirability.

At least five States introduced legislation which would permit the establishment of camp programs; in four the legislation passed, and in one it was defeated.

In at least seven States, considerable activity has taken place with respect to the establishment of a family court. In at least nine jurisdictions, legislation was introduced amending the existing juvenile court statutes, some related to the strengthening of probation service and at least three to the improvement of detention facilities and procedures. Probably the most important State legislation in this area was that passed in California, which brings about major improvements in the juvenile court law. This was the result of a long, careful, well-documented study by the Governor's Committee on Criminal Justice. The legislation incorporated many of the newer standards advocated by the Children's Bureau in *Standards for Specialized Courts Dealing with Children* and the new revision of the *Standard Juvenile Court Act*.

The Interstate Compact on Juveniles was passed in four more States. This brings the number of States that joined the Compact to 34.

Consultation

The volume of consultation was greater this fiscal year than in previous years. Consultation in the field, by correspondence, or office interviews was provided in response to 815 requests. All but 12 of the States received some type of consultation service during the year. Over 80 foreign visitors were provided program information and technical assistance through office interviews.

Program Trends

Increased emphasis was evident on the community organization approach to achieve better planned and coordinated programs to reduce juvenile delinquency and to strengthen these programs. The urgent need for coordination and the spread of community organization concepts to achieve this were given impetus by the 1960 White House Conference on Children and Youth.

Interest and activity in planning and operating services and programs designed wholly or in part to prevent delinquency is very much on the increase. The conviction seems to be growing around the country that dollars and human resources channeled into sound preventive work are likely to yield more visible returns in checking the rise of juvenile delinquency.

The problem posed by the mounting number of unemployed out-of-school youth was of widespread concern during the past year, particularly in terms of the impact on the total delinquency problem. (The present unemployment rate is roughly 5 percent for all age brackets while unemployment among youth under 20 years of age is 20 percent or four times greater.)

As the population of sprawling metropolitan areas continues to grow, communities are intensifying their effort to develop an effective planning and coordinating mechanism. Hopefully, this will bring about more interagency teamwork and clarify functions among the many public and private programs concerned with juvenile delinquency.

The role of girl gang auxiliaries to hostile, aggressive boy gangs received attention in a number of urban areas. Recent newspaper stories calling attention to the existence of girl gangs have reminded the public that juvenile delinquency is not exclusively a male youth problem.

The contribution of citizen leaders to the overall national effort to reduce delinquency is growing. The effectiveness of strong lay committees having sound professional guidance in generating legislative and other action in behalf of children continues to be demonstrated in a large number of States and communities.

The battle against juvenile delinquency continues to be fought with inadequate weapons. Too few personnel, most of whom are inadequately prepared, have failed to stem the tide. Training courses on the local and State level, short courses at universities and colleges, stipends for students, graduate fellowships, curriculums for various kinds of police training—all represent major needs.

Professional staff of juvenile institutions are eager to learn how to introduce group services and apply principles of group living to strengthen institutional treatment programs. There seems to be a tendency among institutional workers to regard group programs as treatment shortcuts to what individual counseling and casework seek to accomplish. Another tendency is to lump group counseling, group therapy, leisure time activities, and group living concepts together without understanding wherein each is different.

Several States without a permanent statutory agency responsible for actively coordinating efforts in the youth field moved closer to this. These States are aware of the need for strengthened coordination and communication among all agencies and groups working on behalf of children and youth.

Significant progress was made toward consolidating the interest in delinquency prevention of official city, metropolitan (city-county) and State youth commissions throughout the country. Sustained consultation was given by the Bureau's delinquency staff during the year

to the Planning Committee established by these Commissions at their initial joint meeting in Washington in March 1960. This Committee was instructed to draft a statement of purpose together with recommendations for organization.

The name "Conference of Public Youth Agencies" was adopted by the organization to enable youth commissions such as those in Chicago and Detroit with a concern for youth welfare generally as well as delinquency prevention to be active members.

The publication *Police Contacts with Juveniles: Perspectives and Guidelines* is in draft form for reviewing purposes. It is being developed in cooperation with the International Association of Chiefs of Police, International Juvenile Officers' Association, International Association of Women Police, and the National Council on Crime and Delinquency.

The trend to building camps continues as a means of providing group care for delinquent boys. Reducing the average length of stay in a training school is a technique employed by many States to cope with the increased size of their institutional populations. Research continues to be a growing enterprise in the institutional field. Group counseling and group psychotherapy command considerable attention in the field in spite of the lack of personnel to carry it out. Increasing concern is reflected by the States about the institutional treatment of the older more aggressive youth. Other areas of interest in institutional problems include the function of halfway houses, adequate staff patterns for various kinds of institutions, how to effect necessary changes in a traditional program without disrupting the complete program, the development of an adequate intake and orientation program, etc.

A great number of courts, including judges and probation staff, continue to be concerned about the degree to which they are meeting their responsibilities. Difficulties are encountered in applying theoretical concepts to daily practices because many of the intervening steps—between the theory and daily practice—have not been spelled out; poorly trained court staff; inadequate budget and, in some instances, a lack of court leadership.

Although the clear statements of the definition of detention, the criteria of admission to detention, and the standards of good detention care (contained in the National Council on Crime and Delinquency's *Standards and Guides for Detention Care of Children and Youth*) are "accepted" on the surface, practice continues to reflect a wide divergence of thought with respect to the nature of detention care, which children should be detained, and what detention should accomplish. The number of detention homes continues to grow; unfortunately, the number of children held in jail does not seem to decrease.

International Activities

UNITED NATIONS INTERNATIONAL CHILDREN'S FUND

This was the first year for the new cycle of meetings—a program session in December and a major policy and program session in June.

At the mid-winter session (postponed from December to January because of the prolongation of the General Assembly) allocations were approved for \$16 million to 122 projects bringing the total allocation for 1960 to \$25,800,000. Increasing aid to Africa was emphasized. An emergency allocation of \$286,000 was made to the Congo.

The Chief of the Bureau headed the U.S. Delegation to this meeting and the Deputy Chief served as Special Adviser.

The main Board session was held in June. From the standpoint of program orientation this meeting was one of the most important in UNICEF's history. Major changes in policy were before the Board and were accepted in toto with strong support from the U.S. Delegation.

Stated simply, instead of having a limited "line" of kinds of aid which countries may have, UNICEF will encourage countries to survey their own needs, come up with their priorities for children, and request aid in these terms. The Board had before it surveys of children's needs produced by the Specialized Agencies of the United Nations and some countries, which pointed up the wide range of problems and the different priorities assigned to these in different parts of the world. This survey of needs was the basis for a policy change toward greater flexibility in programs with a wider spectrum from which a country might choose.

On the basis of another survey—that of training in UNICEF-assisted projects—the policy of greater assistance to training, especially for training facilities *within* countries was adopted. The kinds of aid UNICEF may extend to training projects have been expanded to include payment of salaries of instructors, stipends, and fellowships for trainees, as well as equipment and supplies.

Continuing aid to malaria eradication with the current ceiling of \$10 million per year was accepted, after considerable debate as to its appropriateness, as well as concern for the failures of some campaigns.

At this session about \$10 million was allocated to 83 projects in 51 countries and territories.

The only unusual project was a program for the Congo (Leopoldville) to initiate training for unemployed youth and to stimulate self-help at the village level.

The Deputy Chief of the Bureau served as Special Adviser on the Delegation; Mr. Fred DelliQuadri, as U.S. Representative.

On the invitation of the Mexican Government, the Program Committee of UNICEF spent a week in Mexico preceding the Board meeting, to visit health programs. Seventeen representatives from as many countries spent a very profitable as well as pleasurable time seeing the "grass roots" of UNICEF aid. The Deputy Chief of the Bureau represented the United States. The group saw urban and rural health centers, visited training centers, village sanitation projects, malaria eradication programs, hospitals, nurseries, and even homes.

The malaria eradication program, assisted by UNICEF, provided opportunity for observation of house spraying in remote rural areas. Land once uninhabitable because of malaria is now free of the disease, and people are now living there. The group visited several of these projects—small communities of about 100 families.

The group visited a number of health centers, which are being opened at the rate of one a day in Mexico. UNICEF provides equipment and assists with training of staff for these centers.

MATERNAL AND CHILD CARE AND RELATED RESEARCH MISSION TO THE U.S.S.R.

In mid-October the mission went to the Soviet Union for a 30-day study of research relating to the perinatal and early infancy periods of life. Sponsored by the National Institute of Neurological Diseases and Blindness, this mission was the first of five in the field of Public Health and the Medical Sciences for the 1960–61 period.

The mission was composed of the Deputy Chief of the Bureau, Dr. Stewart Clifford, Chairman, of Children's Hospital, Boston; Dr. Allan C. Barnes, Professor and Chairman of the Department of Obstetrics and Gynecology, Johns-Hopkins Hospital; Dr. Bernard G. Greenberg, of the University of North Carolina School of Public Health; Dr. Edith L. Potter, Professor of Pathology, University of Chicago; and Dr. Fred S. Rosen, Research Fellow in Medicine at Children's Hospital in Boston.

During their 4-week stay the mission visited about 30 institutions in the four cities of Moscow, Leningrad, Kiev, and Tbilisi. Hospitals, clinics, research institutes, creches, kindergartens, and a collective farm were seen and many research workers interviewed.

INTERNATIONAL RESEARCH (FOREIGN CURRENCY PROGRAM)

Under authority of sec. 104(k) of P.L. 480 delegated to the Department of Health, Education, and Welfare and redelegated by the Secretary to the Commissioner of Social Security, the Children's Bureau developed a program and budget proposals for 1962 for projects in its sphere of responsibility. Eight are in maternal and child health in six countries, two are for child welfare in four countries, and one

project is for juvenile delinquency. The program is implemented through the use of excess foreign currencies.

The International Health Research Act of 1960 (P.L. 610) which would have provided a somewhat broader program in child health research was not activated.

CONSULTANT SERVICES

Six professional people recruited by the Children's Bureau worked abroad under the International Cooperation Administration during the year: three social workers, one physician, and two nurses. One of these nurses, in Guatemala, has participated in the planning of a nationwide maternal and child health program, for which the Children's Bureau is at present training a doctor and a nurse from Guatemala.

TRAINING

During the year the Children's Bureau planned and arranged training programs for 64 specialists from 28 countries. Thirty-one of these were physicians, 1 was a dentist; there were 12 nurses, 10 social workers, 5 police officials, 1 judge, 2 lawyers, and a minister and his wife.

The large majority of the physicians pursued a clinical specialty, 12 in obstetrics and gynecology and 9 in pediatrics. The others studied in the field of maternal and child health.

Ten of the 12 nurses attended a college of nursing and followed a program which emphasized either pediatric or maternity nursing. Four of these are candidates for a degree—two for the B.S. and two for the M.S.

Of the 11 trainees who had a primary interest in welfare services for children, 10 were social workers and 1, a lawyer, was an administrative official in the French Ministry of Labor and Social Security.

Five police officials, a judge, and one lawyer all came to the Bureau for program planning because their major interest was juvenile delinquency.

The largest group of trainees (48) was sponsored by ICA and physicians accounted for the majority of these trainees.

Both the number of professions represented by the students for whom programs are planned and implemented, and the type of subspecialty training requested, demonstrate the need for continuing exploration of academic and observation training resources. For example, two pediatricians wished further specialization—one in the study of tuberculosis in children and one in neurology. Several of the social workers requested that a major part of their observation experience be devoted to the organized use of volunteers and programs for training volunteers. The administration of recreation programs not

only in neighborhood houses, but those organized on a city- or county-wide basis was an important item for several of the child welfare students.

Vietnam sent the largest number of students from a single country—eight, of whom six were physicians—followed by India and Thailand with seven each. Vietnam, Thailand, and India sent 14 of the 31 physicians. The concentration in these countries is probably a reflection of their plan to upgrade the quality of medical schools and medical care. The fact that all three of the Iraqi physicians received degrees in public health in the maternal and child health sequence is indicative of Iraq's interest in extending maternal and child health services throughout the country.

Twenty-eight of the 64 students had programs which lasted 12 months, the most frequent time period, and the programs for 8 were from 6 to 12 months' duration. Fifteen of the students, all of them sponsored by ICA, either completed or are still following programs of 18 months or longer. Of these, 10 are physicians, all in clinical specialties, 4 are nurses and 1 is a social worker.

At the end of the fiscal year, 38 students were continuing their programs into the new year. A number of these will return to their homelands in the early fall to be replaced by new students beginning training in the United States.

International visitors come to the Bureau from a number of sources, governmental and private, and many come on their own. They are interested in learning about the function and programs of the Bureau or have a specific interest in one or more of the Bureau's areas of responsibility. During the year, 170 different visitors came from 70 countries.

Appointments programmed for visitors ranged from conferences of an hour or two to programs extending several days to nearly two weeks. They sometimes included observation in and around Washington or in and around the locale of a regional office. The Bureau's visitors represent a wide variety of professions, backgrounds and interests.

Agencies such as the American Council on Education, the Governmental Affairs Institute and the National Social Welfare Assembly, which have contracts with the International Educational Exchange Service of the Department of State for training of foreign specialists, sometimes ask for guidance in selecting appropriate resources to which to send their visitors.

CONSULTATION TO AMERICAN SPECIALISTS EN ROUTE TO FOREIGN ASSIGNMENTS

While the number of American specialists who came to the Bureau for briefing before undertaking foreign assignments is small, it

represents an interesting recognition of the Bureau's international interests. For example, among these specialists was a social worker going to India to work in a child guidance clinic; another was a psychiatric social worker going to Afghanistan, Pakistan and Iran under the auspices of the State Department; another, a USIA Women's Activities Adviser who came to the Bureau for orientation.

TRANSLATIONS

Last year a social worker in El Salvador made a Spanish translation of the Children's Bureau pamphlet, *Child Caring Institutions*, by Martin Gula, but was unable to make arrangements to have it published. The Inter-American Children's Institute took over the task of editing and publishing the translation titled *Internados de Bienestar Infantil* and has distributed it through the Spanish-speaking countries.

The Instituto San Gabriel Arcangel, a school for mentally retarded children in Lima, Peru, is in the process of translating the Children's Bureau pamphlet, *The Mentally Retarded Child at Home*.

OTHER ACTIVITIES

Work was done on the development of material for the Peace Corps in relation to services in the fields of child welfare and maternal and child health that might be given abroad by members of the Corps.

A publication, *The International Activities of the Children's Bureau*, was written in cooperation with the Division of Reports.

Summary

Fiscal 1961 brought many new and challenging opportunities to the Children's Bureau. These were expressed in amendments to title V of the Social Security Act that raised the authorization of the three grant programs to a new high, authorized new research and demonstration project grants in child welfare, and provided that special project grants in the maternal and child health and crippled children's programs could be made directly to institutions of higher learning.

The recommendations of the 1960 White House Conference on Children and Youth were furnishing the impetus for many State and local agencies to reevaluate what they were doing to meet the needs of children and youth. In concert with these agencies the Children's Bureau was analyzing its own functions in terms of 10-year goals. The advent of the new administration also was a potent force leading to the general reexamination of health and welfare programs.

Fiscal 1961 was a year of steady progress and development for the Children's Bureau and its programs.

Federal Credit Unions

The need for a Federal credit union program that existed in 1934 when the program was established still exists today. Established to provide a source of credit for persons of small means and to stimulate systematic savings, the program continues to promote sound credit and thrift practices among credit union members.

The extent to which the program has strengthened family life, raised the standard of living of the members, and increased their self-reliance measures its effectiveness, but these are intangibles that are difficult, if not impossible, to measure. People were faced with financial problems in 1934, and they are faced with similar worries in 1961. An effective credit union program has helped to ameliorate these difficulties for its members in depression times and in times of economic prosperity. During 1960 alone, more than 4½ million loans amounting to nearly \$3 billion were made to members of Federal credit unions, and the 6.1 million members had savings in their credit unions in excess of \$2.3 billion as the year ended.

Loans have been made for a vast variety of provident and productive purposes. Members have financed a better education for themselves or their children, paid for needed medical, hospital, or dental care, bought livestock and equipment to operate their farms, and used the proceeds of a loan for numerous other necessary or desirable purposes.

Other members have used their savings to accomplish these purposes, making a loan unnecessary. Savings have been encouraged in amounts as small as 25 cents, and the bulk of the savings accumulated in credit unions has come from small amounts set aside regularly. Average savings in Federal credit unions amounted to nearly \$400 per member at the end of 1960, and since these savings were accumulated in small amounts at a time, much of it would have been frittered away had it not been for the existence of a convenient place to save in the credit union.

There are at the present time two major gaps in the program. While there are now more than 6 million families participating in the Federal credit union program, potential membership exceeds 11 million. Thus, only slightly more than half—54 percent at the end of 1960—of the potential members actually belong to their credit unions. Continuing educational programs are needed to accomplish wider participation in the program, although slow but steady improvement has been noted. Where only 39 percent of the potential members were actually participating in the program at the end of 1950, the proportion grew to 46 percent by the end of 1955, and continued up to 54 percent on December 31, 1960.

Credit union service to low income groups is the other area that can and should be expanded. Chartering has been predominantly in factories and other industrial establishments, among workers who

have shifted out of the low income category since the depression days of the 1930's. Federal credit unions today serve the middle-income group, for the most part. Means to accomplish successful operation of credit unions among low income groups are being explored, and an early solution is anticipated that will make possible the chartering of Federal credit unions for these groups.

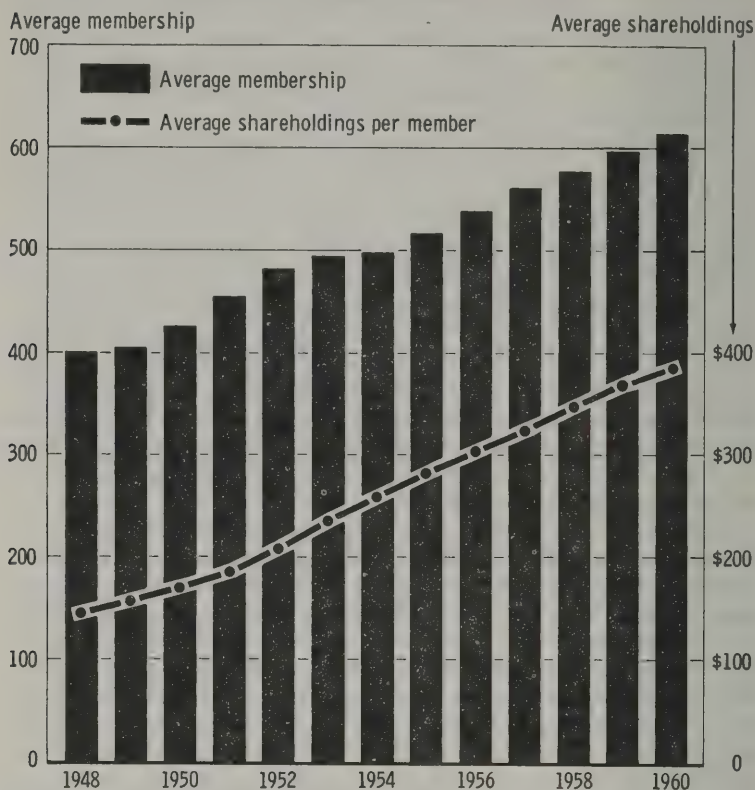
Moving forward to fill in the gaps already noted and further extension of credit union service to millions of our citizens are challenges that will remain with the Bureau far into the future. Growth has been encouraging up to now—it behooves us to do all we can to accelerate that growth. Usurious money lenders continue to take a heavy toll of the worker's income, and with the continually mounting pressure on consumers to go into debt, the need for consumer education in the wise use of credit becomes increasingly more important. The expansion in consumer credit has not lessened the need for savings, and continuing stimulation of systematic savings by the members will go far to allay their fears of financial insecurity. Realization of these objectives will aid in stabilizing the credit structure of the United States, and will provide a further market for securities of the United States.

Issuance of the 10,000th active Federal credit union charter in March 1961 marked an important milestone in credit union history. In presenting the charter to employees of the Inter-American Development Bank, Secretary Ribicoff said, "This charter has special significance since your credit union now becomes the 10,000th active Federal credit union and a part of a program which since June 26, 1934, has effectively demonstrated that these free enterprise institutions owned, controlled and managed by their members do render a genuine thrift service to the people of America and other lands as well."

Some 6,300,000 members had accumulated \$2½ billion in savings (shares) in their Federal credit unions as fiscal year 1961 ended. Although savings in Federal credit unions represent only a small fraction—less than 1 percent—of the total investments of individuals in savings accounts, U.S. Government bonds, and life insurance reserves, an accumulation of this magnitude represents a significant achievement in thrift among the members. These savings have been amassed slowly, often in amounts of a dollar or so at a time, and because of this, it is quite likely that very little of this amount would have been saved had credit union facilities not been available.

Savings not only benefit the savers, but the borrowers as well, since these savings represent the bulk of the funds available to the credit unions for lending purposes. Stimulated by the 1959 amendments to the Federal Credit Union Act, borrowings are now at an all-time high. In 1960, Federal credit union lending approached the \$3-billion level, and on December 31, 1960, loans outstanding topped the \$2-billion mark for the first time. A stepped-up demand for loans, which has outpaced the growth in savings in the past 2 years,

CHART 7.—AVERAGE MEMBERSHIP PER FEDERAL CREDIT UNION AND AVERAGE SHARE HOLDINGS PER MEMBER, DECEMBER 31, 1948-60



has resulted in increased borrowing by credit unions, liquidation of some of their investments, or both, in order to raise cash for lending purposes. Moving up 22 percent over the 1959 level, notes payable in Federal credit unions in 1960 represented 2.7 percent of their total liabilities, the largest proportion in 10 years. Total investments of Federal credit unions fell sharply in 1960, dropping not only below the 1959 level, but below the 1958 amount as well. This was the first year-to-year decline in investments since 1948.

In the past 10 years, Federal credit unions have doubled in number, and resources have increased sixfold. Membership has tripled, and shareholdings are now some seven times the amount a decade ago.

Communication between the Bureau and the Federal credit unions has been improved during the past year with publication of a new *Bulletin*. The first issue was sent to all Federal credit unions in March 1961, and numerous credit union officials have sent in favorable comments and many worthwhile suggestions for future issues. The *Bulletin* keeps officials currently informed on program developments.

Two other major strides in improving communications with Federal credit unions were taken during the fiscal year with completion of a new *Handbook for Federal Credit Unions* and with the drafting of a new *Supervisory Committee Manual*. Both of these manuals are scheduled for distribution before the end of 1961.

Recognition by the President of the value of self-help cooperatives and credit unions in helping to solve the social and economic problems of other countries gave impetus toward greater participation by the Bureau in international activities. The Bureau is working closely with the ICA Cooperative Review Committee, which is developing plans and policies to assist these self-help cooperatives in other countries of the free world.

By continuously streamlining and improving procedures, the Bureau continues to meet its expenses of operation through fees paid by the Federal credit unions, and without appropriation of general funds. Increasing costs of operations, primarily resulting from periodic pay increases and other benefits for Bureau employees, have been absorbed without a corresponding increase in fees, and the fee schedule established in August 1958 remains unchanged as fiscal year 1961 ended. There were no amendments to the Federal Credit Union Act during the year.

Table 1.—Social Security Administration: Funds available and obligations incurred, fiscal years 1961 and 1960¹

[In thousands, data as of June 30, 1961]

	Funds available ²		Obligations incurred	
	1961	1960	1961	1960
Total.....	\$2, 471, 014	\$2, 274, 364	\$2, 470, 676	\$2, 268, 911
Grants to States.....	2, 228, 833	2, 084, 000	2, 231, 990	2, 079, 979
Public assistance ³	2, 177, 000	2, 037, 500	2, 180, 466	2, 033, 761
Old-age assistance.....			1, 211, 709	1, 157, 523
Aid to the blind.....			48, 517	48, 824
Aid to dependent children.....			704, 108	660, 232
Aid to the permanently and totally disabled.....			182, 625	187, 182
Medical assistance for the aged.....			33, 507	
Maternal and child health and welfare services.....	51, 833	46, 500	51, 524	46, 218
Maternal and child health services.....	18, 167	17, 500	18, 114	17, 443
Services for crippled children.....	20, 000	16, 000	19, 797	15, 873
Child welfare services.....	13, 666	13, 000	13, 613	12, 902
Cooperative Research and Demonstration Projects.....	350		347	
Administrative expenses ⁴	241, 831	190, 364	238, 339	188, 932
Office of the Commissioner ⁵	669	613	659	602
Bureau of Old-Age and Survivors Insurance ⁶	232, 200	181, 600	228, 909	180, 476
Bureau of Public Assistance.....	2, 727	2, 345	2, 677	2, 280
Children's Bureau ⁷	2, 494	2, 300	2, 486	2, 278
White House Conference on Children and Youth.....	150	200	146	198
Bureau of Federal Credit Unions.....	3, 591	3, 306	3, 462	3, 098

¹ Funds available and obligations reported by administrative agencies.

² Funds made available by regular and supplemental appropriations, authorizations, transfers, allotments, recoveries, and fee collections for services rendered.

³ Includes \$3,465,750 used from 1962 appropriation to complete 1961 requirements.

⁴ Funds made available and obligations incurred for salaries, printing and binding, communications, traveling expenses, and all other objects of expenditure.

⁵ Appropriations by Congress from general revenues accounted for approximately 50 percent of the administrative expenses of the Office of the Commissioner in 1960 and 1961; balance from old-age and survivors insurance trust fund.

⁶ Administrative costs of the old-age, survivors, and disability insurance program which involved benefit payments of \$10,798,000,000 in 1960 and \$11,884,000,000 in 1961. Does not include construction costs of new buildings as follows: *Funds available*: 1960, \$7,633,744; 1961, \$5,179,585. *Obligations incurred*: 1960, \$2,454,189; 1961, \$4,212,692.

⁷ Includes expenses for investigating and reporting on matters pertaining to the welfare of children authorized by the act of 1912, as well as expenses for administration of grants to States.

Table 2.—Financing social insurance under the Social Security Act: Contributions collected and trust fund operations, fiscal years 1959–61*[In millions; independently rounded]*

Item	1961	1960	1959
Contributions collected under—			
Federal Insurance Contributions Act ¹	\$12,315	\$10,830	\$8,460
Federal Unemployment Tax Act ²	345	341	324
State unemployment insurance laws ³	2,361	2,165	1,675
Old-age and survivors insurance trust fund:			
Receipts, total	11,815	10,342	8,105
Net appropriations and deposits	11,293	9,843	7,565
Net interest and profits on investments	522	500	540
Expenditures, total	11,743	11,055	9,377
Monthly benefits and lump-sum payments	11,185	10,270	9,049
Transfers under financial interchange with railroad retirement account ⁴	322	583	121
Administration	236	202	206
Assets, end of year	20,900	20,829	21,541
Disability insurance trust fund:			
Receipts, total	1,082	1,061	928
Net appropriations and deposits	1,022	987	895
Transfers from railroad retirement account ⁵		26	
Net interest and profit	60	48	33
Expenditures, total	746	560	360
Monthly benefits	704	528	339
Transfers to railroad retirement account ⁵	5		
Administration	36	32	21
Assets, end of year	2,504	2,167	1,667
State accounts in unemployment trust fund:			
Receipts, total	2,614	2,351	2,126
Deposits ⁶	2,417	2,169	1,946
Interest	196	182	179
Withdrawals for benefit payments	3,558	2,366	2,797
Assets, end of year	5,729	6,673	6,688

¹ Contributions on earnings up to and including \$4,200 a year in 1958 and \$4,800 a year beginning Jan. 1, 1959. Contribution rate paid by employers and employees: 2½ percent each beginning Jan. 1, 1957; 2½ percent each beginning Jan. 1, 1959; 3 percent each beginning Jan. 1, 1960. Contribution rate paid by self-employed: 3½ percent beginning Jan. 1, 1957; 3¾ percent beginning Jan. 1, 1959; 4½ percent beginning Jan. 1, 1960. Includes deposits by States under voluntary agreements for coverage of State and local employees. Includes deductions to adjust for reimbursements to general funds of the Treasury of the estimated amount of employee taxes subject to refund on wages in excess of wage base.

² Includes old-age and survivors insurance and, beginning Jan. 1, 1957, disability insurance contributions.

³ Prior to 1957 tax could be paid in quarterly installments by employers of 8 or more; beginning Jan. 31, 1957, tax payable annually on preceding year's wages by employers of 4 or more. Rate is 3 percent (beginning Jan. 1, 1961, 3.1 percent) on first \$3,000 a year of wages paid to each employee by subject employer. Because of credit offset, permitted for contributions paid under State unemployment insurance laws (or for full contribution if reduced by State experience rating provisions), effective rate of 0.3 percent (beginning Jan. 1, 1961, 0.4 percent) of such wages.

⁴ Contributions plus penalties and interest collected from employers and contributions from employees, reported by State agencies.

⁵ Contributions and deposits by States usually differ slightly, because of time lag in making deposits. Deposits in the State accounts also include loans from the Federal unemployment account of the unemployment trust fund and the distribution of Federal tax collections among the States under the Employment Security Administrative Financing Act of 1954.

⁶ Under the financial interchange with the railroad retirement account the two social security trust funds are to be placed in the financial position in which they would have been had railroad employment always been covered under the Social Security Act.

Source: Compiled from *Final Statement of Receipts and Expenditures of the United States Government*, other Treasury reports, and State agency reports.

Table 3.—Old-age, survivors, and disability insurance: Number of families and beneficiaries receiving benefits and average monthly benefit in current-payment status, by family group, end of December 1960 and December 1959

[In thousands, except for average benefit]

Family classification of beneficiaries	Dec. 31, 1960			Dec. 31, 1959		
	Number of families	Number of beneficiaries	Average monthly amount per family	Number of families	Number of beneficiaries	Average monthly amount per family
Total.....	10,959.6	14,844.6	-----	10,112.8	13,703.9	-----
Retired-worker families.....	8,061.5	10,599.0	-----	7,525.6	9,931.6	-----
Worker only.....	5,741.8	5,741.8	\$69.90	5,320.7	5,320.7	\$68.70
Male.....	2,921.7	2,921.7	79.90	2,755.3	2,755.3	78.00
Female.....	2,820.2	2,820.2	59.60	2,565.4	2,565.4	58.70
Worker and aged wife.....	2,122.0	4,243.9	123.90	2,029.4	4,058.8	121.60
Worker and young wife ¹	1.0	2.0	111.00	.8	1.6	118.60
Worker and aged dependent husband.....	14.3	28.6	105.50	14.7	29.3	103.60
Worker and 1 or more children.....	50.2	113.4	119.40	44.8	102.5	118.90
Worker, wife aged 65 or over, and 1 or more children.....	22.0	67.4	157.60	13.0	39.9	157.30
Worker, young wife, and 1 or more children.....	109.9	401.2	152.30	102.1	378.3	151.70
Worker, husband, and 1 or more children.....	.2	.6	115.70	.2	.5	123.70
Survivor families.....	2,442.8	3,558.1	-----	2,252.8	3,312.0	-----
Aged widow.....	1,527.3	1,527.3	57.70	1,380.1	1,380.1	56.70
Aged widow and 1 or more children.....	14.2	29.2	112.90	11.4	23.6	111.20
Aged widow and 1 or 2 aged dependent parents.....	.3	.6	131.00	.1	.3	130.50
Aged dependent widower.....	2.0	2.0	54.10	1.9	1.9	53.40
Widower and 1 or more children.....	(2)	.1	84.40	(2)	(2)	92.60
Widowed mother only ¹	1.4	1.4	64.20	1.1	1.1	55.40
Widowed mother ¹ and 1 aged dependent parent.....	(2)	(2)	173.70	0	0	0
Widowed mother and 1 child.....	171.9	343.9	131.70	159.7	319.4	129.70
Widowed mother and 2 children.....	113.4	340.1	188.00	106.4	319.2	170.70
Widowed mother and 3 or more children.....	113.8	547.6	181.70	108.2	520.1	178.60
Widowed mother, 1 or more children, and 1 or 2 aged dependent parents.....	.5	1.8	214.70	.4	1.6	219.40
Divorced wife and 1 or more children.....	.4	1.0	163.40	.3	.9	166.80
1 child only.....	296.4	296.4	58.50	282.6	282.6	56.90
2 children.....	106.6	213.2	122.50	110.4	220.8	101.30
3 children.....	38.3	115.0	155.00	36.1	108.4	129.50
4 or more children.....	22.6	102.5	167.20	21.6	97.1	148.00
1 or more children and 1 or 2 aged dependent parents.....	.7	1.5	137.60	.8	1.8	136.80
1 aged dependent parent.....	31.6	31.6	60.90	29.8	29.8	59.60
2 aged dependent parents.....	1.5	3.0	107.90	1.7	3.3	104.80
Disabled-worker families.....	455.4	687.5	-----	334.4	460.4	-----
Worker only.....	356.8	356.8	87.90	275.3	275.3	87.90
Male.....	261.3	261.3	91.90	206.3	206.3	91.90
Female.....	95.5	95.5	76.90	69.0	69.0	76.10
Worker and aged wife.....	21.7	43.5	135.60	17.4	34.8	135.90
Worker and young wife ¹.....	.2	.4	143.20	.2	.5	133.20
Worker and aged dependent husband.....	.2	.4	120.70	.2	.3	116.60
Worker and 1 or more children.....	22.0	55.8	164.40	11.2	28.2	153.90
Worker, wife aged 65 or over, and 1 or more children.....	.1	.3	186.20	(2)	.1	204.00
Worker, young wife and 1 or more children.....	54.4	230.3	189.10	30.1	121.1	185.60

¹ Benefits to children were being withheld.

² Less than 50.

Table 4.—Old-age, survivors, and disability insurance: Number and amount of monthly benefits in current-payment status at end of June 1961 and amount of benefit payments in fiscal year 1961, by State

[In thousands]

Beneficiary's State of residence	Monthly benefits in current-payment status, June 30, 1961				Benefit payments in fiscal year 1961 ²			
	Total		OASI ¹		Total	OASI ¹		DI ¹
	Number	Monthly amount	Number	Monthly amount		Monthly benefits	Lump-sum death payments	
Total.....	15,624.2	\$992,032	14,726.5	\$931,705	\$11,888,527	\$11,017,539	\$166,993	\$703,995
Alabama.....	253.3	12,996	229.0	11,602	154,608	136,487	2,190	15,931
Alaska.....	6.4	374	6.1	357	4,543	4,218	11	218
American Samoa.....	(³)	1	(³)	1	0	0	(⁴)	0
Arizona.....	91.3	5,824	83.9	5,298	68,758	61,596	861	6,301
Arkansas.....	170.6	8,537	159.4	7,896	101,805	92,873	1,331	7,601
California.....	1,218.8	81,299	1,158.0	76,643	968,400	901,028	13,633	53,464
Colorado.....	130.3	8,140	124.1	7,717	97,047	91,028	1,370	6,649
Connecticut.....	232.8	16,858	222.7	16,082	203,529	191,417	2,807	9,305
Delaware.....	34.5	2,281	32.6	2,139	27,276	25,351	887	1,688
District of Columbia.....	52.1	3,191	49.0	2,977	38,441	33,297	759	2,385
Florida.....	513.0	33,395	482.7	31,318	367,142	368,125	4,402	24,615
Georgia.....	270.1	13,939	243.2	12,436	165,636	145,965	2,510	17,161
Guam.....	1	5	1	0	62	61	1	(⁴)
Hawaii.....	32.3	1,902	30.2	1,763	22,542	20,738	282	1,522
Idaho.....	56.7	3,493	54.2	3,328	41,641	39,208	508	1,865
Illinois.....	982.2	60,539	839.5	57,337	728,589	681,333	10,289	36,967
Indiana.....	435.6	28,418	413.9	26,887	341,968	319,740	4,587	17,641
Iowa.....	273.9	17,501	270.1	16,860	208,518	198,342	2,591	7,585
Kansas.....	203.1	12,385	194.4	11,755	147,066	138,380	2,076	6,660
Kentucky.....	231.4	15,865	224.0	14,107	186,394	167,071	2,514	16,805
Louisiana.....	201.9	10,894	182.6	9,802	129,083	114,514	2,102	12,467
Maine.....	104.7	6,325	99.3	5,988	76,764	71,573	1,043	4,048
Maryland.....	205.1	13,058	193.4	12,233	157,029	144,841	2,520	9,668
Massachusetts.....	519.4	35,536	495.1	33,783	431,567	403,905	6,366	21,296
Michigan.....	663.0	46,399	626.7	43,716	554,673	516,709	7,170	30,794
Minnesota.....	309.5	19,474	298.8	18,750	231,915	220,959	2,617	8,339
Mississippi.....	171.2	7,763	158.0	7,094	92,231	83,195	1,265	7,771
Missouri.....	423.9	26,146	401.3	24,651	312,931	291,490	4,192	17,249
Montana.....	61.0	3,924	58.3	3,739	47,085	44,290	657	2,138

Nebraska.....	138.0	8,366	133.7	8,078	4.3	288	99,783	95,129	1,280	3,374
Nevada.....	17.1	1,145	16.2	1,076	2.7	71	13,633	12,580	274	829
New Hampshire.....	64.8	4,201	62.1	4,013	9	189	50,764	47,719	768	2,277
New Jersey.....	546.1	38,758	520.1	36,774	26.0	1,984	468,016	437,452	6,959	23,575
New Mexico.....	50.6	2,718	47.2	2,621	3.5	196	31,964	29,283	457	2,224
New York.....	1,579.0	109,823	1,502.0	104,065	76.0	5,758	1,319,116	1,231,115	19,925	68,076
North Carolina.....	1,343.1	17,626	1,313.7	16,971	29.3	1,655	210,334	187,499	3,323	19,512
North Dakota.....	53.3	3,181	51.6	3,084	1.7	97	37,653	36,205	417	1,031
Ohio.....	834.2	56,376	788.1	53,079	46.1	3,296	678,834	630,688	9,517	38,629
Oklahoma.....	195.0	11,245	183.6	10,500	11.4	745	133,402	122,921	1,812	8,669
Oregon.....	179.7	11,849	171.3	11,244	8.4	605	141,961	133,195	1,857	6,909
Pennsylvania.....	1,085.2	73,504	1,021.0	68,825	64.2	4,679	892,148	822,839	12,859	56,450
Puerto Rico.....	113.2	3,731	108.5	3,582	4.8	149	42,857	40,866	1,538	1,538
Rhode Island.....	189.2	6,021	184.6	5,691	4.6	330	73,183	68,107	1,034	4,042
South Carolina.....	163.8	8,230	147.3	7,309	16.5	921	98,113	85,054	1,632	10,527
South Dakota.....	63.5	2,770	61.5	3,042	2.1	128	44,650	42,648	574	1,428
Tennessee.....	288.1	14,803	265.1	13,499	23.0	1,305	176,144	158,550	2,530	15,004
Texas.....	644.2	36,182	602.9	33,593	41.3	2,569	425,803	390,206	6,530	29,058
Utah.....	58.0	3,708	55.6	3,545	2.4	163	44,549	42,046	646	1,857
Vermont.....	40.9	2,488	38.5	2,339	2.4	148	29,893	27,776	414	1,703
Virgin Islands.....	1.3	55	1.2	54	(¹)	1	604	586	5	13
Virginia.....	288.6	15,913	264.0	14,458	24.6	1,455	191,326	171,061	3,173	17,092
Washington.....	257.1	17,144	243.2	16,270	11.9	873	206,792	193,696	2,867	10,229
West Virginia.....	198.5	11,532	173.8	10,078	25.2	1,454	139,178	120,430	1,696	17,052
Wisconsin.....	388.4	25,364	372.0	24,224	16.3	1,139	303,413	286,082	3,860	13,471
Wyoming.....	24.0	1,518	22.9	1,440	1.2	79	18,002	16,835	285	872
Foreign.....	105.1	6,669	102.7	6,480	2.4	189	79,162	76,061	690	2,411

¹ Benefits under the old-age and survivors insurance (OASI) parts of the old-age, survivors, and disability insurance program are payable from the OASI trust fund to old-age (retired-worker) beneficiaries and their dependents and to survivors of deceased workers. Benefits under the disability insurance (DI) part of the program are payable from the DI trust fund to disability (disabled-worker) beneficiaries and their dependents.
² Distribution by State estimated.
³ Less than 50.
⁴ Less than \$500.

Table 5.—Old-age, survivors, and disability insurance: Selected data on employers, workers, taxable earnings, and contributions, by State for specified periods

[In thousands, except for average taxable earnings. Preliminary, corrected to October 24, 1961]

State	Employers reporting taxable wages July–September 1960 ¹	Calendar year 1958 ²			
		Workers reported with taxable earnings	Reported taxable earnings ³		Contributions ⁴
			Total	Average per worker	
Total.....	4, 230	70, 000	\$180, 892, 000	\$2, 580	\$7, 942, 900
Alabama.....	62	1, 060	2, 195, 000	2, 070	96, 600
Alaska.....	4	70	172, 000	2, 460	7, 600
Arizona.....	28	440	1, 015, 000	2, 310	44, 700
Arkansas.....	39	570	976, 000	1, 710	42, 000
California.....	371	5, 950	15, 745, 000	2, 650	691, 400
Colorado.....	42	700	1, 489, 000	2, 130	64, 800
Connecticut.....	65	1, 120	3, 159, 000	2, 820	139, 600
Delaware.....	13	230	601, 000	2, 610	26, 600
District of Columbia.....	29	460	1, 002, 000	2, 180	44, 600
Florida.....	130	1, 790	3, 490, 000	1, 950	152, 600
Georgia.....	89	1, 430	2, 789, 000	1, 950	122, 500
Hawaii.....	12	210	526, 000	2, 500	23, 200
Idaho.....	15	280	606, 000	2, 160	25, 900
Illinois.....	235	4, 340	11, 872, 000	2, 740	621, 500
Indiana.....	93	1, 880	5, 050, 000	2, 690	221, 600
Iowa.....	68	1, 110	2, 576, 000	2, 320	108, 100
Kansas.....	53	890	2, 031, 000	2, 280	87, 500
Kentucky.....	60	950	1, 961, 000	2, 060	85, 000
Louisiana.....	64	1, 010	2, 178, 000	2, 160	95, 800
Maine.....	25	400	761, 000	1, 900	33, 300
Maryland.....	76	1, 170	2, 894, 000	2, 470	127, 800
Massachusetts.....	121	2, 170	5, 536, 000	2, 550	244, 900
Michigan.....	160	2, 960	8, 369, 000	2, 830	369, 800
Minnesota.....	75	1, 280	3, 094, 000	2, 420	133, 400
Mississippi.....	40	630	1, 043, 000	1, 660	45, 500
Missouri.....	107	1, 830	4, 336, 000	2, 370	189, 200
Montana.....	17	290	635, 000	2, 190	27, 200
Nebraska.....	38	640	1, 292, 000	2, 020	54, 300
Nevada.....	8	140	302, 000	2, 160	13, 300
New Hampshire.....	17	260	570, 000	2, 190	25, 100
New Jersey.....	157	2, 600	7, 017, 000	2, 700	309, 700
New Mexico.....	19	300	603, 000	2, 010	26, 300
New York.....	496	7, 880	22, 255, 000	2, 820	983, 300
North Carolina.....	100	1, 690	3, 408, 000	2, 020	149, 200
North Dakota.....	14	240	483, 000	2, 010	19, 600
Ohio.....	202	3, 700	10, 133, 000	2, 740	447, 200
Oklahoma.....	50	820	1, 738, 000	2, 120	76, 100
Oregon.....	44	730	1, 778, 000	2, 440	77, 700
Pennsylvania.....	255	4, 650	12, 686, 000	2, 730	559, 800
Puerto Rico.....	18	590	479, 000	810	21, 100
Rhode Island.....	21	360	867, 000	2, 410	38, 200
South Carolina.....	48	790	1, 530, 000	1, 940	67, 800
South Dakota.....	18	260	524, 000	2, 020	21, 300
Tennessee.....	78	1, 260	2, 589, 000	2, 050	113, 400
Texas.....	229	3, 560	7, 766, 000	2, 180	339, 100
Utah.....	17	340	760, 000	2, 240	33, 300
Vermont.....	11	150	311, 000	2, 070	13, 500
Virginia.....	88	1, 370	2, 834, 000	2, 070	124, 700
Virgin Islands.....	1	10	11, 000	1, 100	400
Washington.....	65	1, 150	2, 871, 000	2, 500	125, 700
West Virginia.....	37	650	1, 562, 000	2, 400	69, 200
Wisconsin.....	94	1, 470	3, 841, 000	2, 610	167, 000
Wyoming.....	9	140	295, 000	2, 110	12, 700
Foreign ⁵		80	213, 000	2, 660	9, 400
Ocean-borne vessels.....		130	395, 000	3, 040	17, 800
Uniformed services (on basic pay).....		3, 400	5, 682, 000	1, 670	255, 700

¹ Data represent number of employers reporting taxable wages by the State of their reporting headquarters. An employer is a legal entity such as a corporation, partnership, or single ownership for which a single tax return is filed. Excludes agricultural employers.

² Data relate to State in which employed; workers employed in more than one State are shown in each State of employment. Includes self-employment.

³ Comprised of wages up to the taxable limit from each employer and self-employment income. The annual limit with respect to wages from a given employer or with respect to self-employment income was \$4,200 in 1958. Averages rounded to nearest \$10.

⁴ Contribution rate was 2½ percent, each, for employees and employers; and 3¾ percent for self-employed persons in 1958.

⁵ Refers to employment of United States citizens outside listed States and other areas by American employers and their foreign subsidiaries.

Table 6.—Old-age, survivors, and disability insurance: Selected data on benefits, employers, workers, and taxable earnings for specified periods, 1959-61

[In thousands, except for average monthly benefit and average taxable earnings; corrected to October 24, 1961]

Item	1961	1960	1959
	Fiscal year		
Benefits in current-payment status (end of period):			
Number (OASI and DI) ¹	15,624.2	14,261.8	13,181.4
Number (OASI).....	14,726.5	13,740.3	12,820.2
Number (DI).....	897.7	521.6	361.2
Old-age (retired-worker).....	8,414.0	7,813.0	7,295.6
Disability (disabled-worker).....	558.1	370.8	275.2
Wife's or husband's (OASI and DI).....	2,432.5	2,279.9	2,141.8
Wife's or husband's (OASI).....	2,329.9	2,223.5	2,108.5
Wife's or husband's (DI).....	102.6	56.4	33.2
Child's (OASI and DI) ²	2,141.3	1,903.5	1,747.7
Child's (OASI) ²	1,904.3	1,809.1	1,694.8
Child's (DI) ²	237.0	94.4	52.8
Widow's or widower's.....	1,621.9	1,471.3	1,322.0
Mother's.....	419.9	387.9	366.5
Parent's.....	36.4	35.5	32.7
Total monthly amount (OASI and DI).....	\$992,032	\$889,863	\$805,545
Total monthly amount (OASI).....	\$931,705	\$851,791	\$778,404
Total monthly amount (DI).....	\$60,327	\$38,071	\$27,141
Old-age (retired-worker).....	\$627,400	\$575,295	\$526,701
Disability (disabled-worker).....	\$49,895	\$33,123	\$24,324
Wife's or husband's (OASI and DI).....	\$94,195	\$87,701	\$81,295
Wife's or husband's (OASI).....	\$90,759	\$85,676	\$80,096
Wife's or husband's (DI).....	\$3,437	\$2,025	\$1,199
Child's (OASI and DI) ²	\$99,233	\$84,789	\$76,209
Child's (OASI) ²	\$92,238	\$81,865	\$74,591
Child's (DI) ²	\$6,995	\$2,924	\$1,618
Widow's or widower's.....	\$94,270	\$84,229	\$74,359
Mother's.....	\$24,823	\$22,609	\$20,760
Parent's.....	\$2,215	2,117	\$1,896
Average monthly amount:			
Old-age (retired-worker).....	\$74.57	\$73.63	\$72.19
Disability (disabled-worker).....	\$89.41	\$89.33	\$88.40
Wife's or husband's (OASI and DI).....	\$38.72	\$38.47	\$37.96
Wife's or husband's (OASI).....	\$38.95	\$38.53	\$37.99
Wife's or husband's (DI).....	\$33.50	\$35.92	\$36.09
Child's (OASI and DI) ²	\$46.34	\$44.54	\$43.61
Child's (OASI) ²	\$48.44	\$45.25	\$44.01
Child's (DI) ²	\$29.51	\$30.98	\$30.62
Widow's or widower's.....	\$58.12	\$57.25	\$56.25
Mother's.....	\$59.11	\$58.29	\$56.65
Parent's.....	\$60.85	\$59.67	\$58.02
Benefit payments during period:			
Monthly benefits (OASI and DI).....	\$11,721,534	\$10,632,223	\$9,238,753
Monthly benefits (OASI).....	\$11,017,539	\$10,103,937	\$8,899,522
Monthly benefits (DI).....	\$703,995	\$528,304	\$339,231
Old-age (retired-worker).....	\$7,371,205	\$6,803,478	\$6,041,417
Disability (disabled-worker).....	\$589,497	\$450,114	\$311,105
Supplementary (OASI and DI).....	\$1,300,137	\$1,183,515	\$1,007,142
Supplementary (OASI).....	\$1,185,639	\$1,105,327	\$979,016
Supplementary (DI).....	\$114,498	\$78,190	\$28,126
Survivor.....	\$2,460,695	\$2,195,132	\$1,879,089
Lump-sum death payments.....	\$166,993	\$165,772	\$149,625
Workers insured for OASI benefits (midpoint of period—Jan.1): ³			
Fully insured.....	85,800	79,700	78,800
Currently but not fully insured.....	84,500	76,600	76,300
Workers insured for disability (midpoint of period—Jan.1): ³	1,300	3,000	2,400
Estimated number of employers reporting taxable wages, 1st quarter of fiscal year.....	44,190	44,170	44,110
	Calendar year		
Estimated number of workers with taxable earnings.....	74,000	73,000	71,500
Estimated amount of taxable earnings.....	\$214,000,000	\$210,000,000	\$203,000,000
Average taxable earnings ⁴	\$2,890	\$2,880	\$2,840

¹ Benefits under the old-age and survivors insurance (OASI) parts of the old-age, survivors, and disability insurance program are payable from the OASI trust fund to old-age insurance (retired-worker) beneficiaries and their dependents and to survivors of deceased workers. Benefits under the disability insurance (DI) part of the program are payable from the DI trust fund to disability insurance (disabled-worker) beneficiaries and their dependents.

² Includes benefits payable to disabled persons aged 18 or over—dependent children of disabled, deceased, or retired workers—whose disability began before age 18.

³ Estimates of insured workers have not been adjusted to reflect changes in insurance status arising from: (1) provisions that coordinate the old-age, survivors, and disability insurance and railroad retirement programs and (2) wage credits for military service. Estimates are only partially adjusted to eliminate duplicate count of persons with taxable earnings reported on more than 1 account number.

⁴ Excludes agricultural employers.

⁵ Rounded to nearest \$10.

Table 7.—*Special types of public assistance under plans approved by the June 1961, and total payments to*

(Includes vendor payments for medical care and cases

State	Old-age assistance			Medical assistance for the aged			Aid to dependent children		
	Number of recipients, June	Payments to recipients		Number of recipients, June	Payments to recipients		Number of recipients, June		
		Average payment, June	Total, fiscal year (in thousands)		Average payment, June	Total, fiscal year (in thousands)	Families	Total ¹	Children
Fiscal year:									
1959.....	2,419,885	\$64.76	\$1,858,004	-----	-----	-----	777,632	2,929,986	2,246,965
1960.....	2,358,539	68.01	1,894,639	-----	-----	-----	794,396	3,023,311	2,330,168
1961.....	2,296,190	67.85	1,914,946	46,428	\$200.59	\$42,899	878,332	3,382,865	2,613,273
Alabama.....	99,881	53.92	63,077	-----	-----	-----	21,494	86,829	68,096
Alaska.....	1,420	66.89	1,105	-----	-----	-----	1,174	4,055	3,044
Arizona.....	14,136	60.82	10,319	-----	-----	-----	8,791	35,617	27,421
Arkansas.....	56,414	52.46	35,105	-----	-----	-----	7,093	27,091	20,917
California.....	253,937	91.50	274,070	-----	-----	-----	87,545	310,936	244,977
Colorado.....	51,270	96.51	60,754	-----	-----	-----	8,154	31,519	24,734
Connecticut.....	13,871	64.95	20,544	-----	-----	-----	8,410	29,096	21,820
Delaware.....	1,205	49.72	749	-----	-----	-----	1,842	7,102	5,535
Dist. of Columbia.....	3,045	66.07	2,522	-----	-----	-----	5,482	24,624	19,485
Florida.....	70,100	60.36	48,363	-----	-----	-----	23,882	87,391	69,517
Georgia.....	95,325	47.07	54,080	-----	-----	-----	16,210	60,218	46,577
Guam.....	99	25.65	29	-----	-----	-----	160	900	748
Hawaii.....	1,439	70.59	1,198	-----	-----	-----	2,473	9,577	7,596
Idaho.....	7,253	82.65	6,577	-----	-----	-----	2,418	9,092	6,731
Illinois.....	70,259	78.13	66,495	-----	-----	-----	43,897	187,584	146,245
Indiana.....	26,157	66.10	20,666	-----	-----	-----	12,113	45,100	34,172
Iowa.....	33,480	88.46	34,202	-----	-----	-----	10,196	37,649	28,458
Kansas.....	27,531	83.06	27,270	-----	-----	-----	6,558	25,219	19,916
Kentucky.....	55,727	50.18	33,490	41	(²)	4	21,402	76,539	57,506
Louisiana.....	126,040	71.43	107,087	-----	-----	-----	22,188	91,126	70,788
Maine.....	11,072	67.64	9,160	-----	-----	-----	5,841	20,737	15,361
Maryland.....	9,615	63.80	7,217	1,603	16.63	27	10,062	42,381	33,363
Massachusetts.....	62,766	81.14	76,017	15,895	198.42	23,209	16,178	55,415	41,240
Michigan.....	56,494	79.83	54,666	4,149	310.37	7,438	29,900	107,360	79,093
Minnesota.....	45,627	94.50	50,981	-----	-----	-----	10,803	37,514	29,317
Mississippi.....	81,132	35.40	33,328	-----	-----	-----	20,803	81,199	63,711
Missouri.....	113,361	61.73	83,373	-----	-----	-----	26,545	102,155	77,772
Montana.....	6,484	64.22	5,100	-----	-----	-----	1,973	7,329	6,799
Nebraska.....	14,377	76.44	13,094	-----	-----	-----	3,156	12,305	9,479
Nevada.....	2,535	78.35	2,362	-----	-----	-----	1,271	4,405	3,468
New Hampshire.....	4,834	85.33	4,768	-----	-----	-----	1,138	4,407	3,343
New Jersey.....	18,952	92.44	20,105	-----	-----	-----	18,700	66,645	50,611
New Mexico.....	11,061	67.42	9,101	-----	-----	-----	7,697	30,083	23,214
New York.....	61,297	81.58	96,426	17,680	242.72	9,627	79,686	325,554	248,502
North Carolina.....	47,593	45.08	25,449	-----	-----	-----	28,758	114,702	88,787
North Dakota.....	7,075	94.23	7,796	-----	-----	-----	1,877	7,031	5,497
Ohio.....	89,814	77.50	80,579	-----	-----	-----	31,322	124,868	95,217
Oklahoma.....	88,161	81.34	88,532	251	195.02	210	18,894	68,007	51,771
Oregon.....	16,469	84.08	16,699	-----	-----	-----	7,050	25,036	18,903
Pennsylvania.....	49,977	66.95	40,580	-----	-----	-----	66,919	273,054	209,325
Puerto Rico.....	37,926	8.30	3,860	-----	-----	-----	58,182	226,195	181,278
Rhode Island.....	6,615	80.89	6,496	-----	-----	-----	5,318	19,821	15,019
South Carolina.....	30,928	45.84	15,474	-----	-----	-----	9,479	37,810	29,998
South Dakota.....	8,479	64.03	6,506	-----	-----	-----	3,236	11,241	8,467
Tennessee.....	53,995	44.03	27,974	-----	-----	-----	22,501	84,272	64,021
Texas.....	220,594	52.78	140,283	-----	-----	-----	19,192	79,714	60,863
Utah.....	7,516	70.67	6,831	-----	-----	-----	4,007	14,951	11,260
Vermont.....	5,611	71.44	4,532	-----	-----	-----	1,343	4,824	3,620
Virgin Islands.....	527	30.77	184	³ 204	³ 9.67	2	267	859	718
Virginia.....	14,459	55.05	8,816	-----	-----	-----	10,357	42,017	32,960
Washington.....	³ 46,930	³ 94.96	54,222	³ 545	³ 199.84	939	³ 12,955	³ 44,375	³ 34,660
West Virginia.....	18,678	40.98	8,857	6,060	64.66	1,444	20,439	79,003	61,582
Wisconsin.....	33,542	89.12	35,028	-----	-----	-----	10,203	37,389	28,506
Wyoming.....	3,105	75.44	2,846	-----	-----	-----	798	2,943	2,265

¹ Includes as recipients the children and 1 parent or other adult relative in families in which the requirements of at least 1 such adult were considered in determining the amount of assistance.

Social Security Administration: Number of recipients and average payment, recipients, by program and State, fiscal year 1961

receiving only such payments; data corrected to October 15, 1961]

Aid to dependent children— Continued			Aid to the blind			Aid to the permanently and totally disabled		
Payments to recipients			Number of recip- ients, June	Payments to recipients		Number of recip- ients, June	Payments to recipients	
Average payment per family, June	Average payment per recipient, June	Total fiscal year (in thousands)		Average pay- ment, June	Total, fiscal year (in thousands)		Average pay- ment, June	Total, fiscal year (in thousands)
\$106.94	\$28.38	\$956,380	109,445	\$69.04	\$89,066	339,214	\$63.37	\$244,664
110.78	29.11	1,021,097	107,978	72.85	92,309	362,815	65.96	271,208
116.68	30.30	1,118,991	105,608	73.36	93,991	383,952	68.19	301,361
41.05	10.16	10,176	1,577	42.01	775	12,215	37.55	5,389
111.35	32.24	1,590	99	72.98	90			
121.66	30.03	11,560	877	72.54	743			
61.66	16.14	5,108	1,998	58.18	1,369	7,477	41.86	3,538
167.56	47.18	162,623	13,589	106.92	17,486	13,202	99.90	12,335
129.95	33.62	11,962	270	80.41	275	5,665	71.17	4,717
178.57	51.61	15,822	300	79.14	371	2,287	93.47	3,947
87.71	22.75	1,754	264	70.79	214	418	66.70	291
150.45	33.50	9,189	208	68.76	178	2,762	75.55	2,540
61.37	16.77	17,222	2,465	62.84	1,852	10,223	65.45	7,490
86.95	23.41	16,363	3,583	52.67	2,253	23,206	51.52	13,784
80.48	14.31	110	6	(9)	1	72	22.79	16
135.08	34.88	3,951	80	78.41	75	979	81.89	977
153.31	40.77	4,107	148	72.38	134	1,186	75.62	990
171.67	40.17	75,915	2,941	86.23	2,989	19,750	87.78	19,431
106.07	28.49	14,706	1,862	76.36	1,661			
126.31	34.21	15,656	1,410	98.53	1,664	714	75.52	663
140.59	36.56	10,688	591	85.79	600	4,200	87.47	4,331
86.78	24.28	21,303	2,407	53.07	1,512	8,006	54.92	5,049
96.17	23.42	24,284	2,773	80.79	2,687	16,526	56.40	11,010
92.59	26.08	6,651	415	65.27	333	2,143	69.19	1,761
126.35	30.00	13,793	433	65.00	350	6,435	65.00	4,943
152.39	44.49	28,537	2,172	126.45	3,080	9,941	132.90	15,997
131.59	36.65	42,654	1,733	80.62	1,710	5,248	102.41	5,952
160.61	46.25	19,323	1,050	106.65	1,310	2,574	61.51	1,819
36.38	9.32	8,762	5,421	38.43	2,815	12,799	34.85	5,144
93.48	24.29	28,271	4,929	65.00	3,919	15,434	64.04	11,691
125.99	33.92	2,816	315	72.76	282	1,246	72.41	1,085
118.89	30.49	4,175	775	92.59	878	2,151	73.94	1,761
95.24	27.48	1,380	179	100.87	216			
160.58	41.47	2,000	246	86.50	249	441	100.63	508
167.98	47.13	31,912	925	88.35	980	7,406	95.32	7,951
126.50	32.37	11,933	359	59.88	267	2,686	70.67	2,142
172.67	42.26	146,047	3,481	96.39	4,905	36,419	107.40	46,148
79.93	20.04	25,631	5,179	55.49	3,361	20,166	50.90	11,662
151.25	40.38	3,360	92	70.96	83	1,138	100.23	1,319
122.75	30.79	40,549	3,509	77.67	3,135	13,771	75.41	11,259
122.76	34.11	25,707	1,810	89.15	2,222	10,033	80.13	10,830
146.15	41.16	11,516	261	93.16	281	5,049	93.69	5,463
120.62	29.66	80,162	17,884	73.33	15,780	17,825	58.64	12,644
14.85	3.82	10,217	1,830	8.27	185	22,587	8.70	2,298
143.79	38.58	8,051	116	79.94	117	2,971	86.88	3,034
61.25	15.36	6,395	1,701	49.75	950	7,975	50.38	4,231
114.12	32.85	4,139	163	62.55	120	1,140	65.22	883
70.13	18.73	18,463	2,644	47.45	1,540	10,482	46.07	5,415
76.99	18.54	17,044	6,326	58.41	4,470	7,351	54.37	4,488
135.89	36.42	6,063	193	78.01	182	2,683	79.71	2,441
110.15	30.66	1,640	112	62.67	93	842	65.17	665
59.81	18.59	170	19	(2)	6	98	35.17	38
98.15	24.19	11,092	1,230	59.78	850	6,641	61.94	4,494
* 167.21	* 48.82	24,620	* 700	* 103.95	853	* 7,440	* 100.08	8,665
97.92	25.33	22,887	985	44.21	508	7,319	43.81	3,664
162.91	44.46	17,679	918	94.35	978	4,047	110.84	4,662
141.01	38.24	1,261	55	84.69	54	583	76.66	506

* Average payment not computed on base of fewer than 50 recipients.

* Estimated.

Table 8.—Special types of public assistance under plans approved by the States and percent from Federal funds, by

[Includes vendor payments for medical care; amounts

State	Federal grants to States ¹						Expenditures for assistance and administration	
	Total	Old-age assistance	Medical assistance for the aged	Aid to dependent children	Aid to the blind	Aid to the permanently and totally disabled	Old-age assistance	
							Amount	Percent from Federal funds
Fiscal year:								
1959.....	\$1,957,098	\$1,132,194	-----	\$626,546	\$47,619	\$150,739	\$1,973,089	58.3
1960.....	2,033,761	1,157,523	-----	660,232	48,824	167,182	2,014,736	58.1
1961.....	2,180,466	1,211,709	\$33,507	704,108	48,517	182,625	2,035,554	59.9
Alabama.....	61,200	47,511	-----	8,763	606	4,320	65,839	74.6
Alaska.....	1,845	734	-----	1,054	57	-----	1,201	62.3
Arizona.....	17,227	7,686	-----	9,032	509	-----	10,533	72.6
Arkansas.....	35,064	26,864	-----	4,353	1,036	2,811	36,322	74.3
California.....	239,515	142,926	-----	82,570	7,302	6,717	294,785	48.2
Colorado.....	39,246	27,830	-----	8,053	166	3,197	63,062	43.0
Connecticut.....	17,317	8,549	-----	7,347	162	1,259	21,870	39.3
Delaware.....	2,332	544	-----	1,431	139	218	830	66.1
District of Columbia.....	9,469	1,716	-----	6,092	121	1,540	2,779	57.3
Florida.....	57,229	35,641	-----	14,677	1,349	5,562	50,930	70.9
Georgia.....	67,393	41,759	-----	13,174	1,720	10,740	56,939	73.3
Guam.....	84	18	-----	55	1	10	34	50.0
Hawaii.....	3,951	794	-----	2,545	43	569	1,300	62.2
Idaho.....	7,672	4,461	-----	2,470	90	651	6,867	67.4
Illinois.....	95,638	41,585	-----	41,752	1,684	10,617	73,330	58.1
Indiana.....	25,854	13,960	-----	10,852	1,042	-----	22,673	63.7
Iowa.....	32,144	21,081	-----	9,907	848	308	36,551	59.6
Kansas.....	27,239	17,648	-----	6,837	343	2,411	29,101	61.4
Kentucky.....	48,247	25,909	175	17,131	1,098	3,934	34,961	73.1
Louisiana.....	106,597	75,161	-----	20,801	1,645	8,990	111,786	66.9
Maine.....	13,551	6,811	-----	5,230	239	1,271	9,612	71.3
Mainland.....	18,364	4,979	25	9,655	240	3,465	7,697	64.6
Massachusetts.....	75,695	42,110	12,341	14,107	1,138	5,999	82,239	49.7
Michigan.....	65,708	33,813	2,823	26,457	922	2,693	68,654	58.2
Minnesota.....	39,887	27,750	-----	10,203	586	1,348	53,734	63.7
Mississippi.....	41,029	26,697	-----	7,764	2,240	4,328	35,247	76.5
Missouri.....	89,342	57,089	-----	21,949	2,280	8,024	87,144	66.2
Montana.....	5,991	3,218	-----	1,909	187	677	5,511	65.1
Nebraska.....	14,005	9,184	-----	3,145	469	1,207	14,064	67.4
Nevada.....	2,678	1,493	-----	1,077	108	-----	2,535	56.9
New Hampshire.....	4,442	2,888	-----	1,148	139	267	5,109	59.4
New Jersey.....	30,847	10,504	-----	15,917	535	3,891	21,668	50.9
New Mexico.....	17,607	6,944	-----	8,913	209	1,541	9,714	70.8
New York.....	165,371	49,231	15,979	77,374	2,248	20,539	108,735	44.2
North Carolina.....	52,407	19,721	-----	21,000	2,673	9,013	26,751	74.5
North Dakota.....	7,670	4,772	-----	2,113	60	725	8,450	67.8
Ohio.....	86,107	48,241	-----	28,910	1,927	7,029	85,824	58.4
Oklahoma.....	81,393	56,949	264	17,312	1,069	5,799	91,109	63.1
Oregon.....	18,586	9,760	-----	5,957	134	2,735	18,176	55.9
Pennsylvania.....	92,545	26,505	-----	53,892	3,458	8,690	43,680	61.4
Puerto Rico.....	9,004	2,198	219	5,199	100	1,288	4,300	47.2
Rhode Island.....	10,215	3,956	-----	4,539	69	1,651	7,073	56.3
South Carolina.....	21,950	12,310	-----	5,564	751	3,325	16,421	75.3
South Dakota.....	8,667	4,733	-----	3,154	95	685	6,970	70.7
Tennessee.....	43,438	22,313	-----	15,598	1,187	4,340	29,709	74.6
Texas.....	124,351	103,228	-----	14,314	3,288	3,501	144,846	71.3
Utah.....	10,049	4,807	-----	3,674	116	1,452	7,210	63.1
Vermont.....	5,060	3,239	-----	1,251	69	501	4,770	71.1
Virgin Islands.....	275	109	16	124	3	23	223	49.9
Virginia.....	20,437	7,039	-----	9,100	673	3,625	9,576	74.3
Washington.....	44,074	27,838	467	11,552	387	3,830	57,005	48.7
West Virginia.....	29,543	7,092	1,196	17,923	392	2,940	9,291	76.6
Wisconsin.....	32,030	19,950	-----	9,468	534	2,078	37,736	54.9
Wyoming.....	2,899	1,859	-----	719	33	288	3,076	60.8

¹ Based on cash advanced for the year; may differ slightly from fiscal-year expenditures from Federal funds reported by States.

Social Security Administration: Federal grants to States and total expenditure program and State, fiscal year 1961

In thousands; data corrected to October 15, 1961]

Expenditures for assistance and administration—Continued

Medical assistance for the aged		Aid to dependent children		Aid to the blind		Aid to the permanently and totally disabled	
Amount	Percent from Federal funds	Amount	Percent from Federal funds	Amount	Percent from Federal funds	Amount	Percent from Federal funds
		\$1,056,620	59.1	\$96,806	49.6	\$273,288	55.3
		1,130,515	58.9	100,203	48.9	302,925	55.8
\$45,899	49.8	1,240,092	57.8	102,212	47.6	335,615	54.7
		11,077	79.6	814	74.8	5,811	75.1
		1,680	61.8	100	56.3		
		11,939	75.4	772	65.8		
		5,476	79.9	1,419	72.0	3,880	73.4
		187,381	44.1	19,380	38.1	14,608	45.2
		13,549	61.3	309	53.0	5,341	59.8
		17,094	43.4	400	41.2	3,683	35.5
		1,972	72.5	246	57.8	360	60.9
		10,068	59.9	192	59.7	2,723	54.4
		19,303	78.9	1,967	68.4	8,364	67.0
		17,586	75.6	2,373	72.4	14,816	72.1
		120	50.0	2	49.9	21	50.0
		4,507	58.1	84	52.7	1,113	50.4
		4,424	54.6	143	63.4	1,097	61.7
		83,507	51.7	3,459	49.3	21,841	48.8
		16,365	67.2	1,928	54.5		
		17,044	58.6	1,827	46.5	675	53.2
		11,603	58.7	647	53.4	4,685	52.3
37	53.1	22,624	75.9	1,622	72.2	5,496	71.6
		27,656	74.0	2,853	57.4	12,625	69.9
		7,089	74.3	348	71.0	1,942	67.1
43	50.0	15,304	66.6	372	63.0	5,393	62.7
24,325	48.2	31,720	44.4	3,264	35.5	17,501	33.6
7,665	50.0	45,595	55.9	1,784	51.2	6,291	42.2
		21,195	48.3	1,402	43.2	2,091	67.3
		10,077	78.1	2,964	75.3	5,845	74.6
		30,523	72.6	4,283	52.9	12,445	65.1
		3,126	61.7	330	57.8	1,232	58.0
		4,559	71.1	941	50.4	1,980	61.5
		1,621	67.3	252	42.8		
		2,204	52.4	270	52.2	592	46.1
		35,202	44.7	1,117	53.9	9,139	44.1
		12,891	68.3	290	72.4	2,373	65.3
10,724	50.0	168,325	47.7	5,766	39.6	53,414	40.9
		27,623	77.7	3,801	70.5	12,510	72.3
		3,694	55.5	96	62.2	1,479	48.6
		44,324	65.9	3,524	54.8	12,526	55.8
228	66.0	26,972	69.2	2,301	46.4	11,513	50.8
		12,948	49.6	300	46.5	6,015	46.2
		88,084	64.5	16,645	19.9	14,315	59.2
		11,248	46.1	219	47.1	2,692	47.1
		8,799	53.1	135	52.1	3,382	48.6
		7,021	79.5	1,021	72.9	4,622	72.8
		4,544	69.4	135	70.0	977	69.8
		20,042	78.3	1,630	73.1	5,940	72.6
		18,560	78.8	4,667	70.0	5,053	69.2
		6,637	58.4	190	61.2	2,581	56.8
		1,796	71.0	100	70.4	720	70.1
11	50.0	214	49.8	8	49.9	47	49.9
		12,339	74.2	949	70.5	5,081	70.1
		26,440	43.3	908	42.1	9,246	41.2
975	48.6	23,636	76.0	534	73.9	3,948	73.6
1,891	67.3	19,338	48.0	1,074	49.5	5,132	41.7
		1,423	53.4	69	54.2	548	53.5

Table 9.—Maternal and child health and welfare services: Grants to States for maternal and child health services, services for crippled children, and child welfare services under the Social Security Act, by program and State, fiscal year 1961¹

[In thousands]

State	Maternal and child health services	Crippled children's services	Child welfare services
United States.....	\$18, 113. 9	\$19, 797. 4	\$13, 613. 1
Alabama.....	568. 4	589. 9	345. 1
Alaska.....	142. 1	161. 6	63. 6
Arizona.....	166. 6	.....	135. 2
Arkansas.....	304. 7	327. 9	231. 2
California.....	941. 7	948. 9	646. 3
Colorado.....	325. 7	243. 0	156. 7
Connecticut.....	282. 8	257. 1	129. 1
Delaware.....	115. 1	122. 1	64. 3
District of Columbia.....	227. 5	232. 2	78. 9
Florida.....	564. 6	414. 8	319. 9
Georgia.....	518. 5	610. 2	391. 1
Hawaii.....	157. 0	172. 4	91. 5
Idaho.....	159. 2	132. 5	88. 4
Illinois.....	480. 1	616. 7	480. 2
Indiana.....	363. 6	432. 6	322. 8
Iowa.....	257. 6	419. 8	256. 3
Kansas.....	213. 9	286. 1	191. 3
Kentucky.....	378. 1	462. 9	354. 3
Louisiana.....	379. 2	472. 5	312. 8
Maine.....	150. 1	142. 5	115. 4
Maryland.....	429. 5	383. 0	212. 4
Massachusetts.....	384. 9	376. 6	220. 5
Michigan.....	670. 3	699. 6	484. 3
Minnesota.....	378. 2	553. 2	284. 3
Mississippi.....	406. 2	474. 1	310. 3
Missouri.....	381. 3	392. 3	297. 1
Montana.....	123. 2	179. 7	100. 6
Nebraska.....	139. 8	60. 2	148. 9
Nevada.....	170. 3	104. 0	61. 2
New Hampshire.....	79. 0	128. 4	84. 6
New Jersey.....	254. 7	287. 2	283. 0
New Mexico.....	216. 4	192. 8	121. 6
New York.....	842. 7	729. 9	696. 1
North Carolina.....	711. 0	818. 8	524. 2
North Dakota.....	121. 9	132. 5	114. 8
Ohio.....	689. 5	671. 6	537. 0
Oklahoma.....	253. 9	303. 9	212. 9
Oregon.....	185. 5	220. 6	164. 3
Pennsylvania.....	795. 1	856. 0	651. 2
Rhode Island.....	178. 0	168. 1	93. 7
South Carolina.....	378. 3	460. 0	308. 7
South Dakota.....	63. 5	133. 2	111. 4
Tennessee.....	543. 1	599. 7	351. 7
Texas.....	787. 2	1, 154. 4	715. 4
Utah.....	108. 2	141. 4	121. 1
Vermont.....	120. 2	118. 2	75. 8
Virginia.....	515. 9	538. 3	365. 5
Washington.....	247. 7	271. 3	202. 9
West Virginia.....	233. 8	330. 4	246. 7
Wisconsin.....	349. 7	430. 0	298. 4
Wyoming.....	111. 2	104. 3	69. 5
Guam.....	68. 3	97. 6	. 9
Puerto Rico.....	376. 5	532. 5	316. 3
Virgin Islands.....	102. 4	107. 9	51. 4

¹ Based on checks issued.

Table 10.—Federal credit unions: Assets and liabilities, Dec. 31, 1959, and Dec. 31, 1960

Assets and liabilities	Amount			Percentage distribution	
	Dec. 31, 1960	Dec. 31, 1959	Change during year	Dec. 31, 1960	Dec. 31, 1959
Number of operating Federal credit unions.....	9,905	9,447	458		
Total assets.....	\$2,669,734,298	\$2,352,813,400	\$316,920,898	100.0	100.0
Loans to members.....	2,021,463,195	1,666,525,512	354,937,683	75.7	70.9
Cash.....	157,615,757	137,677,971	19,937,786	5.9	5.8
U.S. Government obligations.....	93,577,264	110,328,752	-16,751,488	3.5	4.7
Savings and loan shares.....	306,249,764	363,003,574	-56,753,810	11.5	15.5
Loans to other credit unions.....	61,701,066	50,217,364	11,483,702	2.3	2.1
Land and buildings.....	9,699,908	7,778,138	1,921,770	.4	.3
Other assets.....	19,427,344	17,282,089	2,145,255	.7	.7
Total liabilities.....	2,669,734,298	2,352,813,400	316,920,898	100.0	100.0
Notes payable.....	71,275,679	58,427,188	12,848,491	2.7	2.5
Shares.....	2,344,337,197	2,075,055,019	269,282,178	87.8	88.2
Regular reserve.....	111,703,332	91,773,369	19,929,963	4.2	3.9
Special reserve for delinquent loans.....	4,456,218	4,674,782	-218,564	.2	.2
Other reserves ¹	5,899,292	4,629,088	1,270,204	.2	.2
Undivided earnings ²	119,689,894	106,259,883	13,430,011	4.5	4.5
Other liabilities.....	12,372,686	11,994,071	378,615	.4	.5

¹ Reserve for contingencies and special reserve for losses.² Before payment of yearend dividends.**Table 11.—Federal credit unions: Number of members, amount of assets, amount of shares, and amount of loans outstanding, Dec. 31, 1934–60¹**

Year	Number of operating Federal credit unions	Number of members	Assets	Shares	Loans outstanding
1934 ²	39	3,240	\$23,300	\$23,100	\$15,400
1935.....	772	119,420	2,372,100	2,228,400	1,834,200
1936.....	1,751	309,700	9,158,100	8,510,900	7,343,800
1937.....	2,313	483,920	19,264,700	17,649,700	15,695,300
1938.....	2,760	632,050	29,629,000	26,876,100	23,830,100
1939.....	3,182	850,770	47,810,600	43,326,900	37,673,000
1940.....	3,756	1,127,940	72,530,200	65,805,800	55,818,300
1941.....	4,228	1,408,880	106,052,400	97,208,900	69,484,700
1942.....	4,145	1,356,940	119,591,400	109,822,200	43,052,500
1943.....	3,938	1,311,620	127,329,200	117,339,100	35,376,200
1944.....	3,815	1,306,000	144,365,400	133,677,400	34,438,400
1945.....	3,757	1,216,625	153,103,120	140,613,962	35,165,414
1946.....	3,761	1,302,132	173,166,459	159,718,400	56,800,937
1947.....	3,845	1,445,915	210,375,571	192,410,043	91,372,197
1948.....	4,058	1,628,339	258,411,736	235,008,368	137,642,327
1949.....	4,495	1,819,606	316,362,504	285,000,934	186,218,022
1950.....	4,984	2,126,823	405,834,976	361,924,778	263,735,838
1951.....	5,398	2,463,898	504,714,580	457,402,124	299,755,775
1952.....	5,925	2,853,241	662,408,869	597,374,117	415,062,315
1953.....	6,578	3,255,422	854,232,007	767,571,092	573,973,529
1954.....	7,227	3,598,790	1,033,179,042	931,407,456	681,970,336
1955.....	7,806	4,032,220	1,267,427,045	1,135,164,876	863,042,049
1956.....	8,350	4,502,210	1,529,201,927	1,366,258,073	1,049,188,549
1957.....	8,735	4,897,689	1,788,768,332	1,589,190,585	1,257,319,328
1958.....	9,030	5,209,912	2,034,865,575	1,812,017,273	1,370,723,727
1959.....	9,447	5,643,248	2,352,813,400	2,075,055,019	1,666,525,512
1960.....	9,905	6,087,378	2,669,734,298	2,344,337,197	2,021,463,195

¹ Data for 1934–44 on membership, assets, shares, and loans outstanding are partly estimated.² First charter approved October 1, 1934.

Table 12.—Federal credit unions: Selected data on operations, by asset size and State, 1960

Asset size and State	Number of credit unions	Number of members	Total assets	Amount of members' shares		Amount of loans to members		
				Total	Average per member	Made during 1960		Outstanding as of Dec. 31, 1960
						Total	Average	
All credit unions.....	9,905	6,087,378	\$2,609,734,298	\$2,344,337,197	\$385	\$2,975,478,339	\$653	\$2,021,463,195
Credit unions with assets of:								
Less than \$5,000.....	667	47,729	1,713,912	1,604,012	34	1,861,108	130	1,160,647
\$5,000-\$9,999.....	559	60,518	4,194,748	3,742,937	62	5,641,774	171	3,133,762
\$10,000-\$24,999.....	1,250	185,352	20,993,286	18,495,989	99	28,462,423	245	16,173,243
\$25,000-\$49,999.....	1,320	257,551	48,592,228	42,438,769	165	62,896,564	343	38,119,297
\$50,000-\$99,999.....	1,559	430,184	112,494,890	97,792,789	227	137,417,038	443	88,467,795
\$100,000-\$249,999.....	2,069	949,402	333,761,414	291,980,900	307	370,737,409	548	255,725,056
\$250,000-\$499,999.....	1,167	971,414	412,577,052	362,366,707	373	458,309,892	632	316,286,901
\$500,000-\$999,999.....	1,752	1,044,305	519,144,400	453,450,816	411	595,369,064	693	399,209,265
\$1,000,000-\$1,999,999.....	380	989,108	526,363,850	461,388,778	466	587,825,984	750	399,680,761
\$2,000,000-\$4,999,999.....	151	691,347	433,548,983	383,134,100	554	468,319,442	844	321,021,612
\$5,000,000 and over.....	31	400,468	256,379,565	228,241,400	570	258,637,641	859	182,485,156
Credit unions located in:								
Alabama.....	154	78,137	30,788,166	26,890,245	344	40,716,184	538	25,519,069
Alaska.....	27	20,354	7,507,577	6,029,688	326	9,496,912	583	6,079,320
Arizona.....	77	66,004	31,217,909	27,309,095	410	40,748,215	750	28,451,683
Arkansas.....	59	22,419	7,123,484	6,376,714	284	11,275,382	527	6,001,275
California.....	1,014	787,450	383,722,926	340,165,288	432	440,079,088	726	313,244,591
Canal Zone.....	7	9,767	2,585,430	2,361,782	242	2,903,398	218	1,282,009
Colorado.....	142	83,875	37,709,973	32,832,508	391	46,204,238	818	32,231,202
Connecticut.....	298	210,142	113,582,449	102,064,238	486	98,834,248	608	66,154,035
Delaware.....	39	18,262	5,938,789	5,223,762	286	6,928,191	586	5,079,748
District of Columbia.....	141	216,261	90,734,509	78,803,086	364	102,875,205	690	75,524,796
Florida.....	231	185,509	74,203,248	64,698,488	349	92,180,644	556	62,047,063
Georgia.....	167	94,050	31,981,594	27,818,811	296	44,030,574	461	24,931,333
Hawaii.....	162	107,153	73,967,059	65,307,576	709	79,889,216	974	51,538,745
Idaho.....	55	26,573	11,706,887	10,307,772	608	12,482,200	711	10,210,180
Illinois.....	193	106,532	52,352,457	46,734,185	439	52,286,479	707	35,271,431
Indiana.....	327	186,887	94,208,433	83,978,903	450	90,340,620	636	55,642,411
Iowa.....	6	3,016	1,935,433	1,782,917	493	2,072,291	817	1,486,308
Kansas.....	80	54,684	25,453,328	22,397,549	410	26,571,716	811	21,379,638
Kentucky.....	73	26,171	9,031,573	8,083,297	309	11,336,859	525	6,630,161
Louisiana.....	281	135,625	55,662,764	48,623,262	358	67,829,408	625	43,170,457
Maine.....	100	54,873	22,387,155	19,349,593	353	24,275,665	588	17,007,288

Maryland.....	134	87,302	25,582,358	22,711,137	260	32,307,168	459	21,427,772
Massachusetts.....	277	133,734	46,755,473	41,881,218	313	48,753,191	511	32,614,441
Michigan.....	417	419,964	222,642,833	193,572,952	461	229,613,965	881	175,434,554
Minnesota.....	73	22,143	7,952,890	7,107,044	321	7,795,313	683	6,404,974
Mississippi.....	73	42,302	15,305,695	13,184,527	312	20,888,052	615	13,446,694
Missouri.....	43	26,989	11,808,890	10,686,644	396	11,682,997	663	7,590,626
Montana.....	108	37,049	14,184,139	12,484,954	337	14,503,129	709	11,627,887
Nbraska.....	80	46,289	21,234,078	19,081,188	412	22,207,898	787	15,782,408
Nevada.....	57	16,142	11,068,845	10,080,766	401	14,982,859	762	10,318,254
New Hampshire.....	21	16,942	6,509,684	5,006,014	314	4,717,591	586	4,065,934
New Jersey.....	454	249,892	101,085,580	98,711,555	355	93,284,992	555	64,724,401
New Mexico.....	49	43,027	19,661,536	17,054,578	396	27,298,114	704	16,677,500
New York.....	886	496,979	199,311,019	176,263,602	355	206,666,058	641	142,124,235
North Carolina.....	43	29,427	7,469,316	6,593,293	220	9,484,791	401	6,037,299
North Dakota.....	32	10,053	3,990,172	3,538,471	352	3,486,286	683	3,369,548
Ohio.....	533	315,327	134,163,033	118,243,183	375	142,175,301	683	96,773,563
Oklahoma.....	111	57,648	27,305,459	23,963,866	416	32,029,501	761	22,598,018
Oregon.....	167	69,254	29,616,247	25,769,998	371	35,293,176	747	25,465,559
Pennsylvania.....	1,022	534,083	203,902,390	176,410,340	330	222,338,522	589	138,845,510
Puerto Rico.....	34	14,866	4,230,496	3,485,404	234	6,388,147	363	3,630,296
Rhode Island.....	18	6,352	2,697,648	2,430,380	353	1,897,588	532	1,344,529
South Carolina.....	74	44,950	10,837,350	9,458,449	210	15,371,827	334	9,295,479
South Dakota.....	87	29,163	12,522,759	10,947,170	375	15,514,883	801	9,773,501
Tennessee.....	176	99,444	46,750,734	41,313,371	415	63,419,763	393	36,095,542
Texas.....	770	451,853	201,495,085	173,906,318	385	251,018,405	639	161,193,601
Utah.....	78	33,694	15,203,754	13,328,931	396	19,839,610	766	13,758,840
Vermont.....	3	1,313	492,010	405,000	308	423,331	346	233,793
Virginia.....	156	89,456	28,674,064	24,627,208	275	34,948,749	469	22,933,959
Virgin Islands.....	4	1,434	150,021	132,360	92	131,755	359	134,965
Washington.....	162	103,069	51,020,039	44,672,164	433	58,470,319	765	42,187,069
West Virginia.....	101	36,262	14,263,473	12,481,139	344	17,674,745	549	10,460,467
Wisconsin.....	3	317,995	7,808,822	6,945,201	354	233,554	548	268,676
Wyoming.....	50	17,419	7,808,822	6,945,201	399	8,451,011	874	6,511,064

Public Health Service

Health of the Nation

THE GREAT PROBLEMS of providing the best possible health services for all of America's citizens continue to occupy the attention of the Public Health Service. As new knowledge is developed, its benefits must be made available to the people who need them. While the people of the United States have a high level of health, the higher levels which can be achieved as medical knowledge increases remain as a challenge and a hope for the Nation's future.

The Public Health Service is the Federal agency principally concerned with protecting and advancing the Nation's health. In working toward this goal, it cooperates with many other health interests, including private medicine and its allied disciplines, local and State public health authorities, voluntary agencies, colleges and universities, and research organizations.

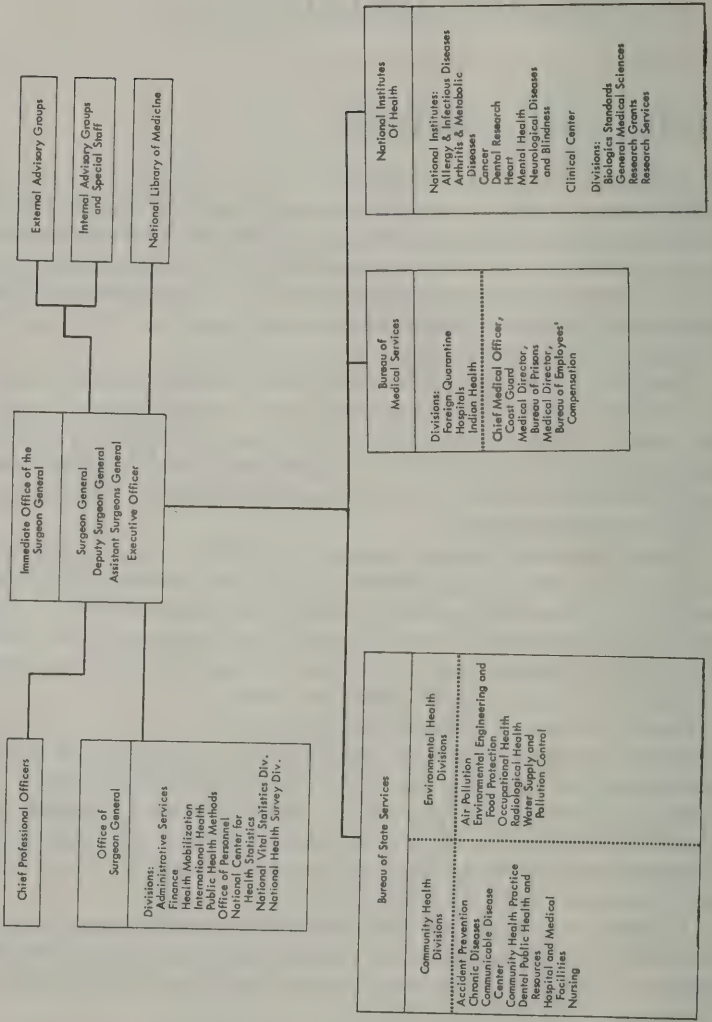
Great changes in the health needs of the Nation, since the establishment of the Public Health Service in 1798, have resulted chiefly from brilliant advances of medical science. These advances have taken place at an accelerating rate. Today, as we begin the decade of the 1960's, health care of the highest possible quality for all the people of this Nation is no longer an unrealistic dream.

From its earliest responsibility of providing medical care for merchant seamen, the Service has added responsibilities for foreign quarantine, the care of a number of groups including American Indians and Alaskan Natives, and the administration of Federal hospitals for victims of narcotics addiction and leprosy. These programs comprise the Bureau of Medical Services, one of the three major subdivisions of the Public Health Service.

Assistance to State and local health departments began with the infectious disease epidemics of the nineteenth and early twentieth centuries. These services have increased and diversified greatly over the years.

Through its Bureau of State Services, the Service now administers extensive programs of grants-in-aid to States and communities for many purposes, including the construction of hospitals and other

CHART 1.—PUBLIC HEALTH SERVICE ORGANIZATION, 1961



health facilities, construction of municipal sewage treatment works, and direct support of State programs in the control of many diseases. Technical assistance, loans of personnel or training of professionals and technicians employed at the State and local level, and research and guidance in public health practices are other means used to aid in public health protection.

The National Institutes of Health is the third component of the Public Health Service. Maintaining a wide variety of medical research projects in its own laboratories, the Institutes also support an extensive research effort in universities and other medical research institutions in this country and abroad. Federal and non-Federal scientists, in partnership, administer this massive attack on the remaining problems of health and disease. The 1960's hold great promise for the elimination or control of some of the great remaining health problems of man.

The next great nationwide health efforts may be expected in two broad areas: the physical environment and comprehensive health care. During the present decade, 1960-70, major national efforts, comparable with the great expansions of medical research and hospitals in the 1950's, will be required in each of these areas. The former will involve the development and application of new, more efficient techniques to measure, evaluate and control natural and artificial factors in the environment which affect health and safety. The latter will involve the development of adequate supplies of well-qualified personnel, appropriate facilities, new and more efficient methods to render comprehensive health services to the American people.

To meet these challenges of the immediate future, the Public Health Service has been carrying out a substantial reorganization during the past year, based on the recommendations of a Task Force appointed in 1960 to study the mission and organization of the Service. The most fundamental changes proposed are designed to make the Service's programs more effective in the development of comprehensive health services, giving special attention to the chronic diseases, and the protection of the public against environmental threats such as water pollution, air pollution and radiation. Details of the organizational changes are contained in the reports of the units and programs concerned.

The Public Health Service had a change of leadership during 1961 when, on January 30, Dr. Luther L. Terry was appointed by President Kennedy to succeed Dr. Leroy E. Burney as Surgeon General. Dr. Terry is the ninth Surgeon General since that office was created in 1871.

HEALTH RECORD

According to National Health Survey studies, the American people experience about 368 million acute health conditions—conditions lasting less than 3 months which involve either medical attention or at least 1 day of restricted activity—in a year, or a little over 2 per person per year. About 47 million persons are injured in a year, or 280 per 1,000 population.

In addition, about 72 million Americans (or 41 percent of the population) suffer from one or more chronic conditions. About 1 person in 14, or 13,500,000 in all, has a chronic limitation affecting his major activity; and about 1 in 200 is confined to the house.

The average person has about 16 days of restricted activity per year due to illness or injury, of which about 6 days involve bed disability. Persons 17 years of age and over show 5.6 days of work loss per year for these reasons, while school-loss days among children 6–16 years of age average 5.3.

In the first half of the past decade, 1951–55,¹ the downward trends of mortality which had generally characterized the preceding 50 years continued. Since 1956, however, death rates have not changed very much, except at ages 15–24 years, where the decline has continued, and at 65 years and over, where the death rate has increased.

The infant death rate dropped 9 percent from 28.4 per 1,000 live births in 1951 to 26.0 in 1956, rose in the next two years, and was lower in 1959. The rate in 1960, 25.7 per 1,000 live births, was 1 percent below the 1956 rate. The maternal mortality rate has declined steadily throughout this period, from 7.5 per 10,000 live births in 1951 to 3.2 in 1960, a drop of 57 percent.

The infectious diseases were once the chief causes of death among children. The principal communicable diseases of childhood—scarlet fever, diphtheria, whooping cough, and measles—for which the combined death rate had declined from about 243 per 100,000 population under 15 years of age in 1900 to 5 in 1950, accounted for 1 death per 100,000 population in this age group in 1960.

The death rates for a number of infectious diseases which once affected mortality significantly at all ages have also dropped since 1951. Thus, the death rate for tuberculosis, which was 20.1 per 100,000 population in 1951, was 5.9 in 1960; and the death rate for syphilis, which began its rapid decline in 1939, at 15.0 per 100,000 population, dropped to 4.1 in 1951 and to 1.7 in 1960.

The death rate for influenza and pneumonia in 1960 was 36.6 per

¹ All vital data are for calendar years. Figures and rates for 1960 are provisional.

CHART 2.—DEATH RATES, 1930-60

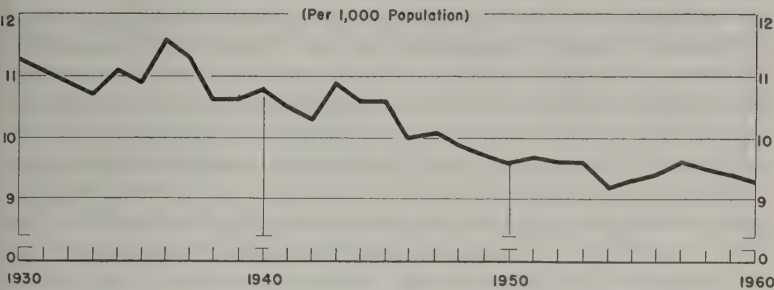


CHART 3.—DEATH RATES FOR THE 10 LEADING CAUSES OF DEATH, 1900 AND 1960

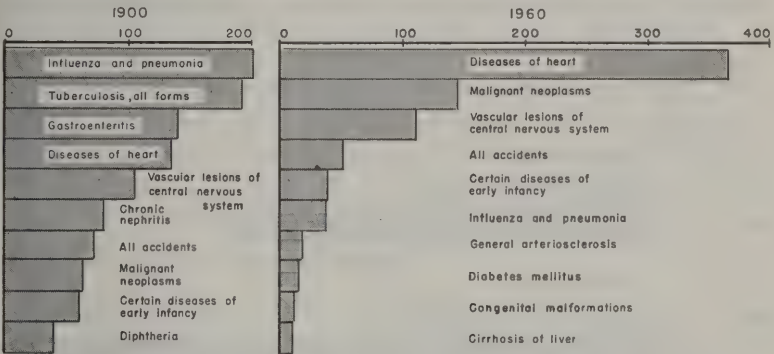
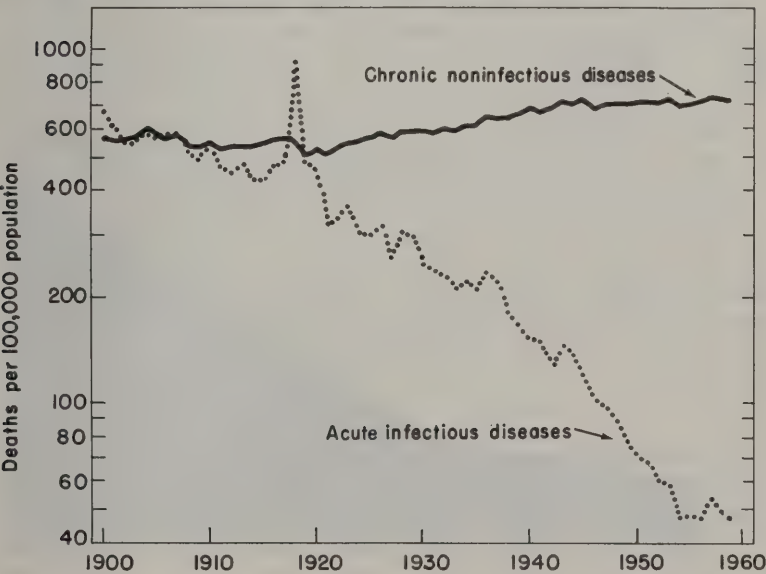


CHART 4.—DEATH RATES FROM CHRONIC DISEASES AND ACUTE INFECTIONS



100,000 population, higher than in any of the previous 11 years. For the first quarter of the year, severe localized outbreaks of respiratory illness were reported throughout most of the country. As a result, the death rate for the first 3 months of 1960 was almost the same as for the first 3 months of 1958, when Asian influenza was prevalent.

Mortality from the major chronic diseases has generally remained stable during the past 4 years, with death rates higher than those reported for the previous 5 years. The death rate for cardiovascular-renal diseases was 518.9 in 1960, compared with 513.0 in 1951. The 1960 cancer death rate was 147.4, about the same as the rate in 1956, but substantially higher than the 140.5 rate in 1951.

Death rates for suicide have fluctuated within a narrow range since 1951, and rates for homicide have remained practically unchanged since 1955, slightly below the rates reported for 1951-54. The rate

CHART 5.—POPULATION GROWTH BY AGE GROUPS, 1900 AND 1960

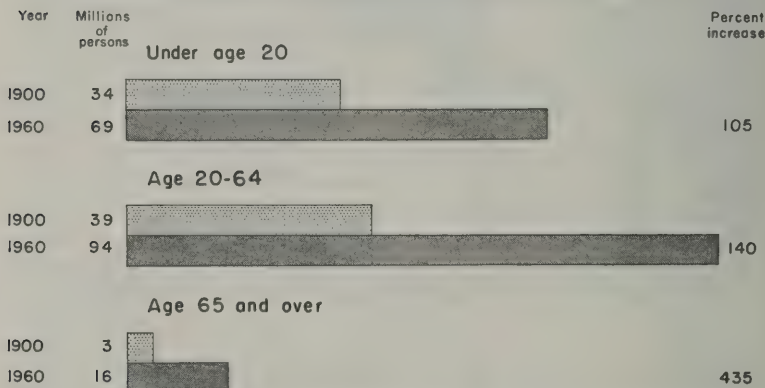
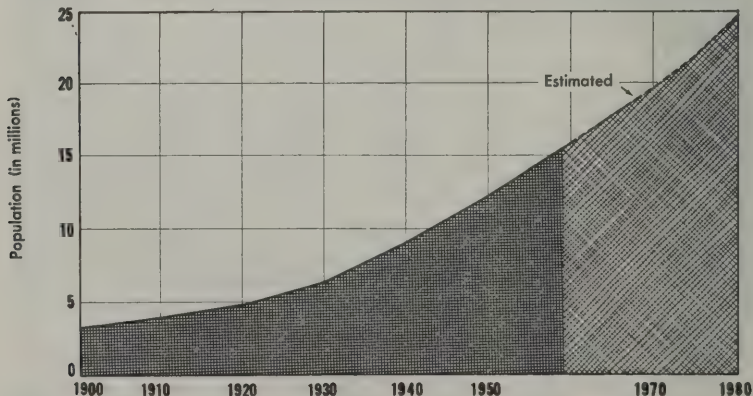


CHART 6.—POPULATION OF THE UNITED STATES 65 YEARS OF AGE AND OVER



for suicide rises to ages 75-84 years, while the rate for homicide reaches its peak at 25-34 years. Mortality from accidents has declined since 1951. Death rates for this cause fall to a low in early childhood, and then rise with increasing age. The death rate for motor vehicle accidents was 24.1 per 100,000 population in 1951, and 20.6 in 1960. No clear trend is apparent, but the level of death rates for this cause has been lower in the past 5 years than from 1951 to 1955. The death rate for nonmotor vehicle accidents declined from 38.4 per 100,000 in 1951 to 31.2 in 1960.

As the mortality data suggest, life expectancy increased more in the first half than in the last half of the decade 1950-60. The average length of life for the entire population was 68.4 years in 1951, 69.6 years in 1956, and 69.7 years in 1960—a net gain of about 1.2 percent for the entire period.

In 1959, life expectancy by color and sex was as follows: white females, 73.9 years (a 1.2 percent gain over 1951); white males, 67.3 years (a 1.0 percent gain); nonwhite males 60.9 years (a 1.3 percent gain); and nonwhite females, 66.2 years (a 1.5 percent gain). Thus, average length of life increased at a faster rate for women than for men, and for the nonwhite than for the white population.

BIRTHS, MARRIAGES, AND DIVORCES

In 1960, about 4,247,000 live births were registered, virtually the same number as in 1959.

Although the number of births in recent years has remained fairly constant, the crude birth rate—the number of births per 1,000 population—has declined somewhat. The 1960 rate of 23.6 represents a drop of 2.1 percent from the 24.1 rate for 1959, and of 3.7 percent from the 24.5 rate for 1951. All these rates, however, are above any that prevailed from the late 1920's through 1945, even when the earlier figures are adjusted for underregistration.

In 1960, about 1,527,000 marriages were performed, an increase of 2.2 percent over the 1959 figure of 1,494,000. The marriage rate, however, remained constant for the 2 years at 8.5 per 1,000 population. The 1951 rate was 10.4.

Divorces totaled 395,000 in 1959, as compared with 368,000 in 1958, for an increase of 7.3 percent. The divorce rate was 2.2 per 1,000 population in 1959, 2.1 in 1958, and 2.5 in 1951.

Funds and Personnel

The total funds available to the Public Health Service in fiscal year 1961 amounted to \$1,233.5 million (see table 1, page 233). Appropriations and authorizations accounted for about \$1,039.6 million of this

amount. The balance was made up of repayments for services given to other agencies and of unobligated balances from previous years.

Over 70 percent of the total funds available was allocated to others, in the form of grants to State and local agencies, private institutions, universities, hospitals, and individuals outside the Federal Government. The remainder was used to support the direct responsibilities of the Public Health Service, such as hospital and medical care for legally designated beneficiaries, foreign and interstate quarantine, and Indian health services.

At the close of fiscal year 1961, the Public Health Service had a full-time staff of 28,630 (see table 2, page 235). This number included 1,803 members of the Regular Commissioned Corps, 2,025 members of the Reserve Corps on active duty, 151 of the Commissioned Reserve on temporary training duty, and 24,651 full-time Civil Service personnel. Part-time personnel totaled 1,364.

National Center for Health Statistics

The National Center for Health Statistics was established in August 1960 following the recommendations of the Task Force which studied the mission and organization of the Public Health Service. Objectives in setting up the Center were to bring together the major components of Public Health Service competence in the measurement of the Nation's health status; to identify significant associations between characteristics of the populations and health-related problems; to stimulate optimal use of technical and methodologic innovations in the collection, processing and analysis of health statistics; to create a resource for technical assistance in statistical data processing; to associate closely the functions of collection, analysis, interpretation and dissemination; to permit expansion of health intelligence programs to correlate and interpret data from various sources; and to give better visibility to the national and international leadership of the Public Health Service in vital and health statistics.

The Centers contains two divisions: the National Health Survey Division, formerly located in the Division of Public Health Methods; and the National Vital Statistics Division, formerly entitled the National Office of Vital Statistics, and located in the Bureau of State Services. In addition, the Center includes an Office of Electronic Systems and an Office of Health Statistics Analysis.

NATIONAL HEALTH SURVEY

The National Health Survey is a continuing program which makes studies to determine the extent of illness and disability in the population of the United States and to gather related information.

During the year the National Health Survey began the development of its third major data-collection mechanism, the Health Records Survey. Much of the information gathered through this undertaking will come from the records of institutions which provide medical, nursing, or personal care. The first project is a survey of nursing homes and similar places to obtain an estimate of the older persons in these institutions, their demographic characteristics, and their health status.

The Health Examination Survey—the first cycle of which consists of a special, standardized health examination given to a representative sample of the adult population—had conducted 15 of the 42 “stands” in its national sample of localities, as of the end of fiscal year 1961. With the acquisition of a second mobile examination center, this Survey is moving through the sample localities at the rate of about 20 stands per year. The second cycle of the Survey, in which a sample of the population aged 6 through 17 years will be examined, is now being planned.

The Health Interview Survey, now in its fifth year of data collection, provided information for eight publications on topics not previously reported on by the National Health Survey: arthritis and rheumatism; diabetes; hernias; acute conditions by geographic distribution; seasonal variations of acute conditions; edentulous persons; health insurance; and distribution and use of hearing aids, wheel chairs, braces, and artificial limbs. Health interview data also became the basis for reports on selected health characteristics of older persons, and selected health characteristics of the population by geographic regions and urban-rural residence and by geographic divisions and large metropolitan areas.

In line with its obligation to develop and test new or improved methods, the National Health Survey Division continued a number of methodological studies already underway and initiated several new projects. The latter included a study to develop a method of gathering information on personal health expenditures, and another to evaluate and refine the household interview collection of data on health insurance coverage in the general population.

NATIONAL VITAL STATISTICS DIVISION

On July 1, 1961, the National Office of Vital Statistics became the National Vital Statistics Division. It collects, tabulates, analyzes, and publishes the official U.S. vital statistics of births, deaths (including fetal deaths), marriages, and divorces on the basis of transcripts of certificates that are filed with non-Federal registration officials acting under State laws. This Division also constructs the official U.S. life tables and related actuarial tables; conducts health and social-research

studies based on vital records and on sampling surveys linked to records; conducts research and methodological studies in vital-statistics methods including the technical, administrative, and legal aspects of vital-records registration and administration; and maintains a continuing program to improve the quality and usefulness of vital statistics through technical assistance and professional training at the Federal, State, local and international levels.

National vital data are used in medical, demographic and educational research, in social welfare, business and government, and in planning programs in public health and other areas.

During the year, the Division and the Bureau of the Census, in cooperation with the University of Chicago, began a study of socioeconomic factors in mortality for 1960. With the approval of State vital statistics offices, the Division selected copies of certificates for deaths occurring from May to August 1960. These records will be matched to the Census of Population data taken as of April 1960 to analyze mortality by the characteristics enumerated for the decedents in the Census when they were still alive.

Among surveys that were completed or started during the year were 2 phases of a study of the incidence of cystic fibrosis, a study of radiological exposures of mothers during pregnancy, and a cardiovascular-renal mortality study. Technical help was given for a national polio inoculation study.

Plans were worked out and initiated so that national marriage and divorce statistics for 1960 will be based for the first time on nationwide samples of marriage and divorce records collected from State and local vital statistics offices. These samples will yield detailed marriage and divorce figures for the United States as a whole, the four regions of the United States, the Marriage Registration Area, and the Divorce Registration Area, as well as for States that participate in the two registration areas. In previous years, detailed marriage and divorce data were available only for reporting registration area States.

At the close of the fiscal year, the Marriage Registration Area (established in 1957) contained 35 States and 4 other areas; the Divorce Registration Area (established in 1958) contained 20 States and 1 other area.

The Model State Vital Statistics Act (1959 Revision) was enacted in six areas during the fiscal year, and has been adopted in part or is receiving consideration in a number of other areas.

The Division cooperated with agencies of the Departments of State, Defense, and Justice, and representatives of State health officers and State vital registrars in arriving at a common ground for improving the birth registration of citizens born abroad and of alien-adopted children. A committee of the Council of State Governments con-

sidered and endorsed the actions that were taken by the cooperating group, and recommended repeal of conflicting State laws.

OFFICE OF ELECTRONIC SYSTEMS

Established toward the close of the fiscal year, the Office of Electronic Systems has been engaged in the planning, site preparation, staffing, training, and programming activities incident to installation of computer facilities.

OFFICE OF HEALTH STATISTICS ANALYSIS

This Office was also constituted during the latter part of the fiscal year. The Office will: study and interpret health and vital statistics to assess the health status of the population; develop measures and indexes of health; study problems in disease classification and coordinate national proposals for revision of the International Classification of Diseases; and act as secretariat for the U.S. National Committee on Vital and Health Statistics in its program to promote technical developments in the field of vital and health statistics.

National Library of Medicine

The National Library of Medicine continues to provide service to the world medical community through published bibliographical guides, an extensive interlibrary loan program, reader services, and reference research assistance. Its conventional systems for the organization, storage, retrieval, and dissemination of information are becoming severely taxed with the acceleration of medical research and the resulting increasing amount of scientific publications. As a consequence, the Library has responded by developing two new programs for the improvement of medical communication services.

Work started in 1961 on a 2-year program for the design and testing of an electronic data processing system to improve the Library's capacity to store, retrieve, and disseminate information useful to workers in medicine and public health. Termed MEDLARS (Medical Literature Analysis and Retrieval System), the new system should improve the Library's responsiveness to the current and continuing needs of multiple research groups, reduce the duplicative effort now involved in literature screening, offer more prompt and more efficient literature reference services, and enlarge, improve, and speed publication of the *Index Medicus*.

In addition, plans were made for an extramural program utilizing grant and contract mechanisms. This program is designed to support traditional publication media, strengthen services and resources of medical libraries, and encourage research and development in new and improved medical communication systems.

BOARD OF REGENTS

The Board of Regents met on November 5, 1960, and April 7, 1961. At the November meeting the Board received the Director's report on the status of the Library, and discussed the development of extramural programs. At the April meeting the Medical Literature Analysis and Retrieval System project and Library program and budget plans for fiscal year 1963 were presented and approved.

NEW BUILDING

The new building was 80 percent complete at the end of the year, and planning was underway for dedication ceremonies on December 14-15, 1961. In anticipation of increasingly heavy work loads in the reference and interlibrary loan area, plans were completed for rearrangement of the collections and the application of mobile microphotographic equipment in the photoduplication process to facilitate user services when the new building is occupied.

PROGRAM STATISTICS

In fiscal year 1961 the Library acquired 16,951 books, 69,968 serial pieces, and added 1,336 new serial titles, increasing its collections to 1,066,068 items. The History of Medicine collection was increased by 288 old and rare volumes. The staff cataloged 27,186 titles, and 813 pictures were added to the art collection. There were 152,768 volumes circulated, and 10,090 reference questions were answered. Main entries published in the *National Library of Medicine Catalog* totaled 18,219. The *Index Medicus* published 130,000 items from 1,775 journal titles. Interlibrary loan requests increased to 109,258 from the prior year experience of 95,595. Microfilm production amounted to 2,775,552 pages of which 689,954 pages were for preservation purposes and 2,085,598 pages for interlibrary loan.

PUBLIC HEALTH METHODS

The Division of Public Health Methods provides staff services to the Surgeon General, develops and conducts research studies of health and related problems in the population, and participates in planning public health activities to meet current and foreseeable needs. The Division edits and publishes *Public Health Reports*, the official journal of the Public Health Service in public health practice and administration.

MANPOWER AND MEDICAL EDUCATION

Guides for the planning and construction of new medical schools were developed in cooperation with the Division of Hospital and Medical Facilities and the Ad Hoc Committee on Medical School

Architecture of the Association of American Medical Colleges and the American Medical Association. One volume, "Medical School Facilities: Planning Considerations," examines the role and responsibilities of the medical school and the composition of its faculty and curriculum, summarizes general architectural requirements, and presents cost estimates and elements in planning. The companion volume, "Medical School Facilities: Planning Considerations and Architectural Guide," presents the same background material, but deals technically in architectural and engineering terms with the amount and type of space needed for the various medical school activities.

The eleventh in the series of health manpower source books, published during the year, presents basic data on medical school alumni as of mid-1959. The data include State of practice, type of practice, and full-time specialization for all graduates (living in 1959) of each of the 78 active 4-year medical schools in the United States, by year of graduation. Relationship between State of practice and State where medical school was attended is also shown.

The baccalaureate origins of 1950-59 medical graduates were studied to find out which and what kinds of colleges have been important in preparing medical students. The study, to appear shortly as *Public Health Monograph No. 66*, shows the relationship between the proportion of graduates who became physicians and such characteristics of the undergraduate college as type of program, administrative control, tuition, and location.

A survey of 1950 medical school graduates, conducted in cooperation with the Council on Medical Education and Hospitals of the American Medical Association, relates current data to earlier data to show trends in medical practice. Type and method of practice, location of practice, place of residence before medical school, and graduate training for this group of physicians are reported.

A nationwide survey of social welfare manpower as of 1960 was conducted jointly with the Bureau of Labor Statistics of the Department of Labor, the National Social Welfare Assembly, and the Social Security Administration. Detailed analysis of employment characteristics, levels of education, and annual salaries for the 11,700 medical and psychiatric social workers included in the survey is underway.

WORK IN OTHER FIELDS

The editing of a comprehensive textbook on administration of community health services, sponsored by the International City Managers' Association and prepared in consultation with a special advisory committee of the American Public Health Association, was completed for publication. The book consists of 26 chapters by

authorities in various phases of community health services. It is intended to serve chief administrators and health officers in cities and counties as a guide to public health policies, problems, and administrative methods.

Additional reports and studies published or scheduled for publication during the year include the eighth listing of the Clearinghouse on Morbidity Projects; an article analyzing health needs of the aged and current proposals for meeting these needs; a chapter on current methods of financing hospital care for a book on hospital administration; the first study for the United States on a national basis of work loss due to illness in selected occupations and industries; a study of the causes of death responsible for recent increases in sex mortality differentials in the United States; an epidemiological diet study in North Dakota; an article on illness in the United States as estimated from the Monthly Report on the Labor Force; and a paper on death rates for coronary heart disease in metropolitan and other areas.

In connection with a study of medical group practice in the United States, three preliminary papers and a directory of medical groups practicing in 1959 have been published. A comprehensive report on the study is in preparation.

Other projects underway include a survey of medical and health resources in the Cleveland metropolitan area; analysis of factors affecting the use and effectiveness of medical care in the absence of major financial barriers to care; a study of the undergraduates origins of 1950-59 medical graduates of individual medical schools; and preparation of a revised directory of homemaker services.

The Division provided staff services for a committee on medical care of the National Advisory Health Council and other technical assistance and consultation to congressional committees and to State, regional, and professional organizations.

Division of International Health

The Division of International Health arranges for Public Health Service participation and official United States representation in international health organizations, particularly the World Health Organization (WHO) and the Pan American Health Organization (PAHO); provides program and policy guidance to the Department of State on international health matters; gives technical advice to the International Cooperation Administration (ICA) and assigns technical personnel to its overseas missions. It is the responsibility of the Division to negotiate with the Soviet Ministry of Health for exchanges of scientists under the U.S.-U.S.S.R. exchange agreement and, in cooperation with the National Institutes of Health and research

facilities outside the government, to plan itineraries of visiting Soviet delegations or individual scientists. The Division develops studies of health conditions and resources in various countries of the world and arranges for widespread circulation of technical publications of international health organizations to interested groups in the United States.

During the year, the Division arranged for the official United States Delegations to the 14th World Health Assembly in New Delhi in February 1961, the 12th Meeting of the Directing Council of the Pan American Health Organization, Washington, October 1960, and the 43d Meeting of that Organization's Executive Committee in Washington in May 1961. The Division, in consultation with the Department of State, developed official United States policy on topics discussed at these meetings, including the global malaria eradication campaign, intensified international medical research program, public health aspects of ionizing radiation, and worldwide community water supply program.

The Chief of the Division was appointed by the President of the United States to be the U.S. Member on the WHO Executive Board and the Assistant Chief was appointed U.S. Member on the PAHO Executive Committee. In addition, an officer of the Division served as Alternate United States Commissioner on the South Pacific Commission, a consultative body composed of representatives of the six metropolitan governments administering territories in the South Pacific area. The Commission's purpose is to encourage and strengthen international cooperation in promoting the economic and social welfare and advancement of the South Pacific peoples.

The Division also acted in an advisory capacity with respect to health-related matters which came before meetings of other international organizations, such as the Food and Agriculture Organization, United Nations Children's Fund, and the International Labor Organization.

Public Health Service officers also served international organizations as members of WHO expert panels or as short-term consultants to WHO or PAHO. For example, approximately 80 service officers are members of WHO panels in 38 health specialties.

The Division assisted the Office of Public Health, ICA, in preparing a series of 10-year health plans for Africa, including plans for the eradication of smallpox and malaria and for control of trachoma, yaws, and treponematosi. More than 100 Public Health Service officers served with ICA overseas missions during the year.

The Division also worked with the U.S. Peace Corps in arranging for assignment of medical officers to serve either as medical advisors in the Peace Corps headquarters or to provide medical care for volun-

teers at project sites. In this connection, four medical officers and three civil service employees from the Service were on duty at the Peace Corps in Washington during the latter half of the year and one of the medical officers made a trip to Tanganyika to survey health and medical care facilities in preparation for a Peace Corps project in that country.

Negotiations under the U.S.-U.S.S.R agreement resulted in the exchange of 3 delegations from each country for a period of 30 days. The U.S. delegations, comprising 17 scientists, were in the fields of metabolic diseases, maternal and child care, and infectious diseases. The three Soviet delegations, with a total of 15 scientists, were in industrial medicine and hygiene, cardiovascular diseases, and oncology. In addition to the exchange of missions, the program brought five Soviet cancer specialists to the United States for a cancer meeting; sent six U.S. heart specialists to a joint heart meeting in Moscow; and assigned a National Cancer Institute scientist to spend 6 months in research at the Institute of Experimental Pathology and Therapy of Cancer at the Academy of Science in Moscow.

The Division assisted in preparation and staffing of an exhibit on health and medicine in the United States at the First International Health Exhibition, sponsored by the Government of Italy and held in Rome from November 10, 1960 to January 8, 1961. Studies of health conditions and resources in the Philippines, Venezuela, Egypt, Guatemala, and El Salvador were compiled from published material during the year, bringing to 26 the number of such studies completed by the Division.

One function which has increased in scope in recent years is the extensive distribution of a variety of technical publications of the World Health Organization, Pan American Health Organization, and South Pacific Commission. During fiscal year 1961, the Division distributed more than 7,500 such publications on a complimentary basis throughout this country.

Division of Health Mobilization

The health mobilization program of the Public Health Service is intended to carry out Federal responsibilities for health services under the national plan for civil defense and defense mobilization. The objective is to meet the health needs of the civilian population in the event of a national emergency. In July 1960, the Division of Health Mobilization, which is responsible for administering this program, was transferred from the Bureau of State Services to the Office of the Surgeon General.

During the year, work was continued on plans for an emergency health service which would serve as the health arm of the Federal

emergency civilian government in a national disaster. This service combines personnel of the Public Health Service, Food and Drug Administration, Office of Vocational Rehabilitation, medical personnel from the Children's Bureau, and personnel from the Veterans Administration and other Federal agencies with health responsibilities. Delineation of organization and functions neared completion and key positions were staffed.

Processes were continued to develop data on calculating potential bomb damage; providing maximum facility protection; computing requirements for community medical supplies and equipment; analyzing the available resources; inventorying holdings of survival items.

Effective October 1, 1960, management of the national emergency medical stockpile was transferred to the Public Health Service from the Office of Civil and Defense Mobilization. The stockpile includes some \$169 million in equipment and supplies, including 1,930 civil defense emergency hospitals. Most of these hospitals are in strategic non-target locations throughout the country and the other inventories are stored at 34 different warehouse facilities.

Four national training courses were prepared and presented on the health mobilization aspects of civil defense. Assistance was given to the presentation of 4 similar courses sponsored by the health departments in 4 States. The division also aided the States in conducting training exercises in the setup and operation of civil defense emergency hospitals. Staff assigned to Public Health Service Regional Offices worked closely with State health organizations to aid in developing community health capabilities for emergencies.

A research project was completed under contract from the Office of Civil and Defense Mobilization on what a person needs to know to survive a national disaster and meet his own health needs if deprived of a physician's services. Working in cooperation with the American Medical Association, a medical self-help training course including an instruction kit, was developed and tested; and a reference manual for use by householders, *Family Guide—Emergency Health Care*, was completed.

Other research completed includes development of (1) scale models of civil defense emergency hospitals; (2) plans for a prototype mutual aid water supply; (3) methods of mobilizing and managing health manpower in a national emergency; and surveys of (1) water utilities and sewage utilities; (2) medical supplies on drug racks in grocery stores and warehouses.

Projects in progress but not completed during the fiscal year were (1) creation of an austere medical care procedures manual to be used as a guide in training all health personnel; (2) survey of current availability of medical survival items in private physicians' offices.

Bureau of State Services

This Bureau was vitally affected by the decision to reorganize the Public Health Service so that greater emphasis could be put upon the two major health problems of today: how to build comprehensive health care programs and how to safeguard the environment against hazardous pollutants.

Because the solution to both problems depends primarily upon State and local actions, the challenge to this Bureau was how to improve its services to States and community health agencies.

As a first step in meeting this challenge, the Bureau has strengthened its own administrative and program staffs in both the environmental and the community health fields and has regrouped its Divisions to assure a tighter coordination of all activities in each of these two major areas.

The Robert A. Taft Sanitary Engineering Center, formerly a unit of one of the divisions, was brought directly under Bureau administration. This center conducts research, gives technical training and assists States and communities with problems of water and air pollution, radiological health and milk and food sanitation. Its activities are reported under the divisions it services.

The reorganization of the Bureau program is described in the following division reports.

Division of Community Health Practice

Established February 1, 1961, this new Division supersedes the former Division of General Health Services. The year's activities included the coordination and management of \$274 million appropriated for grants-in-aid and \$2 million for training professional public health personnel. Technical assistance and consultation were provided throughout the country on State and community health programs and field research, health programs for schools and migrant workers, health education, and planning for professional training, including the education programs scheduled in the United States for foreign students and visitors from 89 nations. The Arctic Health Research Center, which does basic research on health problems in low-temperature areas, was transferred at year's end from this Division to the Bureau's environmental health administration.

A new activity was added: the administration of a special grant of \$86,320, transferred from the President's contingency fund, to enable Florida and Dade County to set up comprehensive health services for 25,000 to 50,000 Cuban refugees. Included were diagnostic screening, dental and medical care, hospitalization, and other needed services and clinics in which Cuban medical personnel assisted county health personnel.

GRANTS MANAGEMENT

For fiscal year 1961, a total of \$274,100,000 was available for grants-in-aid to States and territories to conduct public health programs and to build hospitals and other health facilities. This reflected an increase over the preceding year of \$4,625,000 which was shared among four programs: \$2 million for general health programs; \$1,250,000 for cancer control; \$1 million for mental health activities; and \$375,000 for heart disease control.

Actual payments from total available funds were distributed as follows:

General health services.....	\$16, 755, 443
Venereal disease special projects.....	¹ 2, 379, 805
Tuberculosis control.....	3, 982, 055
Mental health activities.....	5, 941, 888
Cancer control.....	3, 313, 568
Heart disease control.....	3, 300, 482
Hospital and medical facilities construction.....	157, 004, 031
Waste treatment works construction.....	44, 085, 200
Water pollution control.....	² 2, 891, 860

¹ Includes \$847,754 in supplies and services furnished in lieu of cash.
² Includes \$248,844 paid to interstate agencies.

Other payments helped to strengthen public health training and build up the supply of qualified personnel needed in modern health programs. A total of \$1,991,819 was distributed for traineeships for professional public health workers, and \$6,099,858 for professional nurses preparing for administration, supervision, and teaching. For training and demonstration projects in air pollution control, payments totaled \$122,287; grants for radiological health training, \$134,559; grants to accredited schools of public health, \$951,210; and project grants for expanding graduate and specialized curricula, \$446,892.

In addition, community cancer demonstration projects received \$1,257,164 in funds and \$48,970 in personal services furnished in lieu of cash. From the appropriation for construction of mental health facilities in Alaska, a total of \$2,801,482 had been paid through June 30, 1961.

PUBLIC HEALTH ADMINISTRATION

The Public Health Administration Branch gave technical assistance and consultation to State and local health agencies on several major concerns assigned to the Division, such as metropolitan health problems, programs related to general health grants, the development of comprehensive community health services, and training and demonstration activities. Staff assistance was also provided for a number of interdepartmental committees.

The Branch conducts intramural studies on community health needs and resources, health attitudes, and survey techniques. One such

study was published: *The Impact of Asian Influenza on Community Life*. Another was prepared for publication: *A Health Study in Kit Carson County, Colorado*.

A study of physicians' attitudes and practices with respect to smoking was started. The findings will be used to develop an educational program for patients affected by heavy smoking. An investigation of the psychological effects of fear-arousing information was begun to help formulate better educational materials on diseases such as cancer. Other studies were underway on public acceptance of immunization programs; penicillin prophylaxis among college students with rheumatic fever; health problems in economically depressed areas; and medical care costs and administration.

School health staff members participated in many working conferences with representatives of State and regional agencies and voluntary groups. Two regional institutes, cosponsored with the American Association for Health, Physical Education, and Recreation, were held in Los Angeles and Seattle, with about 100 participants from 8 western States. The institutes were designed to bring together professors of health education in teacher-training institutions and key education and health officials; and to provide discussions on new developments in the health sciences. Additional regional institutes are being planned to meet requests from other areas.

National attention to problems of agricultural migrant workers and families has accelerated State and regional interests in health programs for migrants. At the request of the Association of State and Territorial Health Officers, a personal health form was designed for uniform recording of data important to physicians and agencies providing medical services for migrant family members as they travel from place to place. Thirty-four States requested a supply of the forms shortly after they became available. Current studies deal with the health aspects of a social service program, the crew-leader's role in migrant health, and a project linking community health services for migrants along one migratory route between Texas and Michigan.

EXTRAMURAL RESEARCH DEVELOPMENT

Community-based research to find more effective patterns for the delivery of modern health services continued to gain support among public and private agencies and schools of public health. More than a dozen State health departments now have a director or coordinator specifically responsible for developing such research projects throughout their departments.

To help meet increasing requests for consultative and liaison services, the Division recently established a separate Research Grants Branch. Its staff provides consultation for individual investigators,

and works closely with other research staffs and committees, both within and outside the Department, on matters of promotion, policy, and training related to research in public health practice.

The Branch collects and disseminates nationwide data on community-based research projects, resources, and needs. In one regional office a research development staff has been set up on an experimental basis to determine if consultation services to State and local health departments can be provided more effectively from a decentralized location. Other regional offices have been cosponsors for several conferences held for State and local health officials interested in research programs.

PUBLIC HEALTH EDUCATION

The Health Education and Information Branch completed comprehensive reviews of health education programs in several State health departments; leadership training projects were organized; staff services to international organizations concerned with health education research were provided, as well as speakers and consultants for meetings of public health workers; and health educators were recruited for Public Health Service programs.

To exchange ideas and coordinate efforts, joint planning conferences were conducted with State directors of health education, professors of health education from schools of public health, and staffs of voluntary health agencies.

Three Branch health educators were loaned to States: one to develop the educational phases of a state medical care program, another to obtain experience in a local health department, and the third to serve as State director of health education.

TRAINING

Traineeships were awarded to support the graduate and specialized public health training of 607 physicians, dentists, nurses, sanitary engineers, health educators, veterinarians, and many other categories of professional personnel essential to modern public health practice.

In August 1960 the Congress authorized a new program of project grants designed to help eligible schools enlarge their capacity and improve curricula for training professional health workers. More than half of 138 eligible schools responded with 164 proposals that included stronger programs in sanitary chemistry and biology; improved field training; preparation of teachers in public health nursing; and curriculum expansion in medical care administration, rehabilitation, metropolitan planning, radiological health, and air hygiene and pollution. Out of the total proposals, 92 projects were approved and 63 could be supported from the \$1,430,000 appropriated for the first year.

INTERNATIONAL EDUCATION AND EXCHANGE

A total of 605 international health students and visitors from 89 countries received program assistance for 3,109 months of study and observation in the United States. The program involved 136 training centers, of which 86 were academic institutions. Major support for these activities comes from the International Cooperation Administration, which sponsors the largest single group of students and visitors. Those sponsored by the United Nations and other agencies are also given advisory and technical assistance.

Comparison of 1961 with 1960 showed that the number of foreign students training in our medical schools increased 50 percent, while those sent to schools of public health declined about 50 percent. By countries of origin, 199 came from 15 Far East countries; and 181 came from 26 Latin American countries, representing a sharp increase over 1960 as well as broader sponsorship. Twenty-nine countries in the Near East, Africa, and South Asia sent 146 students and visitors; 18 European countries sent 78; and Canada, 1.

ARCTIC HEALTH RESEARCH CENTER

The only research unit of its kind in the United States, the Arctic Health Research Center is concerned with health problems related to life in low-temperature areas. Study fields include environmental sanitation, biochemistry and nutrition, entomology, epidemiology, physiology, and zoonotic disease.

During the year several investigations dealt with epidemic outbreaks—principally hepatitis, trichinosis, and respiratory infections. A study was completed on an outbreak at Fort Yukon, where more than 40 percent of the populace was affected; and influenza Type B was established as the cause.

Requests increased for consultation on small institutional-type waste disposal methods in remote areas, where central water distribution is not available. Water supply studies included testing for reservoir liner materials that will withstand ice and frost action; well jetting; experiments in air lock installations, and low-cost hypochlorite feeder systems.

Other studies of the Center involved aquatic biology, entomologic identifications, nutrition surveys, social and educational observations, tuberculosis chemotherapy, brucellosis, tularemia, hydatid disease, and rabies. Studies on adaptation to cold were extended, with observations of human subjects for determination of individual adaptation by age, sex, and occupation.

Division of Hospital and Medical Facilities

Planning activities of the Hill-Burton Program were highlighted during fiscal 1961 by the completion of two significant reports: "Planning of Facilities for Mental Health Services," which presented findings of a special committee selected by the Surgeon General; and "Areawide Planning of Hospitals and Related Health Facilities," which presents the conclusions of a joint committee of the American Hospital Association and the Public Health Service.

A third report, "Medical School Facilities—Planning Considerations and Architectural Guide," was nearing completion as the fiscal year ended. This publication was prepared in cooperation with the Division of Public Health Methods and the Ad Hoc Committee on Planning Medical School Architecture of the Association of American Medical Colleges and of the American Medical Association.

Other problem areas were also explored by special committees, with assistance provided by the Division staff. These committees, which are continuing their work into next year, are concerned with such problems as long-term care, rehabilitation, and tuberculosis.

The Division continued its program of providing construction and research grants, participating in surveys and studies, preparing and disseminating guide materials for hospitals and related health facilities, and providing consultation to those involved in health facility planning, construction and administration.

CONSTRUCTION PROGRAM

Since the first allocation was made in 1947, some 5,688 Hill-Burton health facility projects have been approved for Federal assistance. This represents a total cost of \$4.9 billion of which the Federal contribution was \$1.6 billion. A total of 238,946 beds for inpatient care and 1,596 health units for outpatient care will be available as a result of these projects. Thus, earlier shortages, particularly in the area of general hospital beds, have been substantially reduced by the program. In addition to general hospitals, which represent 61.3 percent of all Hill-Burton projects to date, other types of facilities provided aid include: mental hospitals, 2.4 percent of the total projects; tuberculosis facilities, 1.3 percent; chronic disease hospitals, 3.3 percent; nursing homes, 5.5 percent; public health centers and State health laboratories, 15.6 percent; diagnostic centers, 7.2 percent; and rehabilitation centers, 3.4 percent.

Although sizable gains have been made in general hospital construction (79 percent of the need has been met compared with 59 percent in 1948), a number of health facility problems continue to confront many communities. New needs have been created by

scientific advances, new patterns of care, shifts in population, lengthening life span, and obsolescence of existing facilities, particularly in metropolitan areas. To meet these needs requires continued sound State planning with strong community support.

The Nation's greatest gap in health facilities is in the area of long-term care. There are great differences in the present level of availability of long-term care facilities among the States. The five States which currently have the highest ratio of nursing home beds per 1,000 elderly, proportionately have seven times more long-term beds than the five States with the lowest ratio. If the country as a whole were to be brought to the level of the five highest ranking States we would need a half-million more long-term beds.

Another great need is the development of small community or regional facilities for the mentally ill which would eventually replace the large State-owned institutions which now primarily serve a custodial function.

RESEARCH GRANTS

Hospital research is a growing activity in the Hill-Burton program. During the past fiscal year funds were provided for 34 extramural research projects, 22 of which were begun prior to June 1960. The grants, totaling \$1,015,690, were made to universities, associations, and other nonprofit organizations interested in investigating means for providing effective patient care by the most efficient means at the lowest possible cost. The grants were made in five general areas: (1) the development of more effective organizational patterns for providing services; (2) better community planning and coordination of hospital facilities and operations; (3) studies of hospital admissions and utilization of hospital services; (4) architectural and equipment design; and (5) methods for improving and simplifying working procedures.

In the area of intramural research, the primary focus continued on Progressive Patient Care. Preliminary reports were completed on three studies—"Estimating Bed Needs in a Progressive Patient Care Hospital," "Progressive Patient Care Cost Methodology," and "Personnel Evaluation, Training and Procedures in Progressive Patient Care." In addition, several new studies were begun during the year.

The Division has found through its surveys that a growing percentage of hospitals throughout the Nation are incorporating one or more of the elements of progressive patient care into their organizational and operational structure. The staff has, through orientation, guide material, exhibits, speeches and consultation, given widespread distribution to this concept of care which emphasizes "the tailoring of services to meet the patient's needs."

COOPERATIVE STUDIES

Many studies have been undertaken by the Division—some in collaboration with other agencies and organizations concerned with the same problems. For example, the Division has joined forces with the American Hospital Association and the State of Georgia Department of Health in a pilot study to develop a methodology for uniform joint reporting of basic hospital statistics. Such uniform reporting will be an aid in State licensure and planning, in the gathering and compilation of National statistics, and in Civil Defense planning. Another example is the assistance provided to John Hopkins University in its examination of physical plant and operating needs of 10 Pennsylvania general hospitals which were built in former coal mining communities. Still another cooperative effort was the joint development with the American Nursing Home Association of a manual for expense accounting in nursing homes, based on experience gained in a study of nursing home costs conducted jointly at the invitation of the Pennsylvania Department of Public Welfare.

Approximately 200 publications have been prepared by the Division over the past several years. During the past year alone, approximately 200,000 requests for these publications were answered.

A growing number of visitors from the U.S. and abroad come to the Division for advice and consultation. Foreign visitors during the past year included representatives from England, Scotland, Pakistan, Paraguay, Yugoslavia, Poland, Costa Rica, Japan, the Philippines, Australia, and Viet Nam.

Division of Chronic Diseases

Established February 1, 1961, the Division of Chronic Diseases has as its overall mission the prevention of the occurrence and progression of chronic disability and dependency. The Cancer Control and Heart Disease Control Programs were transferred from the former Division of Special Health Services into the new Division without organizational change. The Chronic Disease Program of the Division of Special Health Services was expanded into three separate program branches within the new Division. These branches are: Arthritis and Diabetes, Vision and Hearing Conservation, and Health Services for Long Term Illness (including problems of the aged).

HEART DISEASE CONTROL

The Heart Disease Control Program supports and promotes the use of research products and new techniques to reduce the effects of cardiovascular disease. One hundred twelve medical and other professional personnel—a 50-percent increase over last year—are assigned to States to further heart disease control programs.

Heart Disease in Children

Laboratory technicians from all 50 States, 4 territories, and 5 cities were trained at the Communicable Disease Center in the fluorescent antibody technique for the rapid identification of the organism associated with the onset of rheumatic fever and rheumatic heart disease. Nine States conducted 12 in-State training courses for 210 technicians, and equipment and training personnel are scheduled solidly through December 1962.

A test utilizing tape-recorded heart sounds to screen 33,000 school children for heart disease was completed in Chicago, and is stimulating other areas to initiate screening projects. Plans are under way to test inexpensive, portable equipment, and to develop electronic methods for initial screening of the tapes.

Heart Disease in Adults

To identify and measure the role of various factors in coronary artery disease, epidemiologic, clinical and laboratory studies are in progress in 12 States. As background data, coronary death rates by counties and other geographic areas are being computed for the 10-year period 1950-59 for several States.

Through a series of projects in several States, it has been demonstrated that most stroke patients can be restored to self-care; restorative services for stroke patients are being improved and extended.

A long-term community study in Mercer County, W. Va., is endeavoring to provide a scientific basis for deciding whether treatment reduces morbidity and mortality of moderate hypertensives. Elsewhere, the effect of sodium in drinking water on the management of patients with congestive heart failure is being investigated.

Institutes and workshops were held in many places to teach heart disease control to health and related personnel. For example, the Program was instrumental in stimulating a series of cooperative training workshops for health and welfare workers in New Jersey, Colorado, Massachusetts, Kentucky, and Puerto Rico.

A laboratory unit to standardize procedures and tests used in heart disease studies has been established at the Communicable Disease Center in Atlanta.

A computer program for automated electrocardiographic analysis has successfully classified electrocardiograms by statistical techniques. A test on a larger scale is planned. Preliminary studies in electrocardiographic telemetry and in computer analysis of phonocardiograms are in process.

CANCER CONTROL

For the first time in more than a decade, Federal assistance to State health departments for cancer control was increased this fiscal

year. Federal funds rose from \$2.25 million to \$3.5 million, with a \$25,000 minimum per State. In those States able to budget the increase immediately, most of the additional funds were put to use for clinic and casefinding activities and for program development.

Demonstration Projects

Seventy-nine Community Cancer Demonstration Project Grants were awarded, totaling \$1,781,153. These projects are hastening the application locally of current knowledge for controlling cancer. Sixteen projects planned to examine some 50,000 women for uterine cancer. To bolster programs such as these, the education of nearly 200 cytotechnicians was aided through grants to approved schools of cytotechnology. Other grants supported projects in professional and public education, collection and analysis of data to improve care, in rehabilitation, and in other activities.

Both the Cancer Control Program and the Association of State and Territorial Health Officers encouraged and emphasized cancer examinations among the comparatively high risk group of women receiving medical care from public agencies. Cytologic smears are being processed by the Washington Cytology Unit, the Cancer Control Program's laboratory, to help other Federal agencies to increase the number of beneficiaries being examined for uterine cancer.

"Shoptalk," a technique to aid professional education, passed from an experimental to an operation stage. Perfected with the cooperation of the American Academy of General Practice, this technique uses filmstrips and tape-recordings of family physicians and specialists discussing practical problems of cancer control. The Academy is using these films and tapes to promote further discussion among other groups of physicians on the problems and opportunities in their daily practice in applying cancer detection and diagnostic techniques.

The Public Health Service position on smoking and lung cancer was presented to medical and public health groups, in national, regional, and local meetings, including the annual meeting of the American Medical Association.

HEALTH SERVICES FOR LONG-TERM ILLNESS

Some 25 contracts and agreements related to health services for the chronically ill had been approved as of June 30, 1961 with State and local health and welfare agencies and nonprofit organizations. They were mainly training, survey, and research projects planned to prepare the way for broad service programs.

Major areas of interest are:

Nursing Care of the Sick at Home.—Professional nurses and assistants from both official and voluntary health agencies render services

to that major proportion of the chronically ill and aged not residing in institutions.

Homemaker Services.—Home help is supplied when illness or disability creates a family need for such service.

Coordinated Home Care.—Selected patients at home receive physician-directed medical, nursing, social, and related services through a plan based on coordination, evaluation, and follow-up.

Information and Referral.—Information concerning community health and medical care resources is made available from a central source, and consultation and guidance are offered to patients, families, and professional personnel.

Periodic Health Appraisal.—The detection of disease in apparently well persons, the determination of the individual's health status, and the early prevention of disability are furthered by periodic appraisals that include health history, physical examination, and clinical and laboratory tests and procedures.

Nursing Home Services.—Many chronically ill and aged persons not in need of hospital care are accommodated in facilities that are designed, staffed, and equipped to provide nursing care and related medical services under State license.

Technical assistance was supplied in the formulation of State Plans regarding grant expenditures for community health activities and services.

More than 10,000 nursing aides in nursing homes have been trained through coordinated training activities developed in cooperation with the American Red Cross.

Projects supported in eight communities have provided hospital guidance and consultation services to nursing homes, and a documentary film on this operation has been produced.

Over 10,000 copies of the "Nursing Home Standards Guide" have been distributed to State and local public and private agencies.

Staff assistance was contributed for planning and conducting the White House Conference on Aging. National and Regional Institutes and Seminars were sponsored for the study of home care, nursing homes, and coordinated home care. Nursing home personnel will be trained in accounting techniques at Regional Seminars organized by the Program.

DIABETES AND ARTHRITIS

The Diabetes and Arthritis Branch cooperates with the National Institute of Arthritis and Metabolic Diseases by applying new research developments in community programs as soon as feasible.

Diabetes Blood Testing

Diabetes detection and field research activities have been advanced. A preliminary report of blood test screening projects shows that 59 health agencies in 16 States and one territory screened over 74,000 persons during the fiscal year 1961.

Employees of 27 federal agencies were included in a diabetes detection program conducted by the Federal Employee Health Program and the Diabetes and Arthritis Branch. Results of 20,000 tests made in the Washington, D.C., area are under study, and screening is continuing.

A continuing study of abnormal carbohydrate metabolism in pregnancy conducted by a field research staff in Boston has disclosed that there is a reduction in the frequency of births of large weight babies among women treated with insulin during pregnancy. Followup examinations of 307 pregnant women treated with insulin, 307 positive controls, and 319 negative controls have resulted in the diagnosis of diabetes in 36 insulin treated women, 45 positive controls, and one negative control patient.

Automated Diabetes Instruction

Time consumed by busy physicians instructing diabetes patients in self-care may be reduced significantly by an automated instructional course in diabetes being developed in cooperation with manufacturers of a self-instruction machine. The machine has been successfully used in industrial and armed forces training. The automatic teaching device will be tested in several health department clinics during the next fiscal year.

Arthritis Control

Though early detection of arthritis has not yet progressed to the same degree as diabetes control activities, attention and study have been given to possible utilization of several promising uric acid screening methods. A number of communities are being explored as possible sites for field research in screening for gout—a disease that can be controlled with the prophylactic use of certain drugs.

VISION AND HEARING CONSERVATION

The Vision and Hearing Conservation Branch works closely with official State and local health agencies, national voluntary agencies, and the National Institute of Neurological Diseases and Blindness to develop a nationwide program for the early detection and management of vision and hearing impairments.

Increasing awareness of the effectiveness of early detection of glaucoma in preventing blindness or serious sight impairment has resulted

in widespread adoption of glaucoma screening programs by State and local health departments. Nearly half of all the State and territorial health departments have glaucoma detection programs. Approximately 100,000 persons were screened during the fiscal year.

National Reporting System

In cooperation with the National Society for the Prevention of Blindness, the Branch has developed a national reporting system to obtain definitive information on glaucoma screening methods being used in local programs. The reports will supply valuable data on prevalence of the disease nationally, the types of population most susceptible to glaucoma, and the most effective screening methods.

Validation of various screening tests in predicting the development of definite simple glaucoma was continued in a Glaucoma Collaborative Study involving five university ophthalmologic centers. This 5-year study is supported by grants from the National Institute of Neurological Diseases and Blindness. About 600 patients already have been evaluated.

The specificity and sensitivity of the Schiøtz type tonometer is being studied at the University of Tennessee School of Medicine.

Tonometer Sheath Developed

A disposable, latex-rubber sheath called a "tonofilm" that keeps the footplate of a tonometer sterile during glaucoma screening tests has been developed. The device shows promise of reducing the hazards of eye contamination in large-scale screening operations where instruments have to be used repeatedly and kept sterile. Conventional methods of sterilizing tonometers are not very effective. The "tonofilm" is being evaluated at two clinics before production is permitted for general use.

Hearing Conservation

A committee of expert consultants in audiometry and audiology was formed to develop criteria for hearing measurements that can be used in programs. Studies are being planned to develop information on the extent to which hearing loss is preventable or remediable, the effect of the aging process on hearing loss, and the types of hearing tests and standards that can be applied to community screening programs.

Communicable Disease Center

The Communicable Disease Center, Atlanta, Ga., carries out Public Health Service programs in the control of infectious diseases. It

conducts epidemiological, field, and laboratory studies and provides various types of technical assistance to State health departments. Because of the global nature of infectious diseases, CDC also participates in health efforts around the world. It provides technical support and personnel for the health programs spearheaded by the International Cooperation Administration. It also cooperates with the World Health Organization through representation on expert advisory panels and committees and as a laboratory diagnostic and study center.

This year, CDC brought all its central activities together in new headquarters buildings adjacent to Emory University, which were dedicated on September 8, 1960. The Southeastern Rabies Field Station was moved from Montgomery, Ala., to Chamblee, Ga., and established as a National Rabies Laboratory. In April, a new laboratory building adjoining the University of Kansas Medical Center was dedicated to house the Kansas City Field Station. This installation conducts investigations of the systemic mycoses and respiratory and enteric viral infections.

With the transfer of the tuberculosis program to CDC this year, control activities for all infectious diseases became centralized. In addition, responsibility for collecting and publishing morbidity and mortality reports of communicable diseases was transferred from the National Office of Vital Statistics to CDC on January 1, 1961.

EPIDEMIC AND DISASTER AID

Epidemic aid was extended in 38 instances to 23 States, and additionally to West Berlin and American Samoa. Several other States, the District of Columbia, and Puerto Rico sought consultations in connection with epidemics.

Infectious and serum hepatitis epidemics accounted for 11 calls for aid, poliomyelitis for 5. Other diseases included infantile diarrhea, diphtheria, encephalitis, staphylococcal infections, streptococcal infections, rabies, trichinosis, erythema infectiosum, anthrax, and typhoid fever. A localized concentration of leukemia in Cook Co., Ill., was studied in conjunction with the National Cancer Institute.

Disaster aid was furnished to eight States in nine instances, primarily in connection with emergency vector control.

REPRESENTATIVE DISEASE STUDIES

Quota Sample Surveys

The "quota sample survey" developed at CDC in 1959 was improved and modified, and its use was extended to a number of com-

municable diseases. Originally designed to assess polio immunization levels of different population groups within a community, it was used this year to study epidemiological patterns of polio and several other diseases and to investigate factors possibly related to a concentration of cases of leukemia. When broadly applied, this technique promises to be a useful adjunct to guiding and evaluating many types of local health programs.

Venereal Diseases

Infectious syphilis morbidity climbed to 18,781 reported cases during fiscal year 1961—the greatest number recorded in any year since 1950. Increased incidence involved both sexes and all age and racial groups. Thirty-seven States reported an upswing in cases, both among clinic and private patient groups, with 10 large cities contributing 42.3 percent of the total number of infectious cases.

In an effort to reverse the tide, the Venereal Disease Control Program supported epidemiologic and casefinding services in 45 States and Territories through 82 project grants and through assignment of 226 doctors, nurses, health program representatives, and public health advisors to health departments. In addition, 123 public health workers were hired under cooperative agreements between the Public Health Service and other agencies.

In the States, programs to visit private physicians and stimulate them to report all syphilis cases and permit epidemiological follow-up were vigorously pursued. Nearly 75 percent of infectious cases reported by physicians last year were subjected to the same rapid and intensive investigation in regard to contacts that is applied to most clinic cases. Every infectious case is regarded as an emergency. Since one out of four patients reports out-of-State contacts, epidemiologic information is transmitted by long-distance telephone. In some instances, outbreaks stemming from a single source have been found to span the continent and even cross oceans. Re-interviewing and cluster testing are used to locate, examine, and bring to treatment as many contacts as possible.

A revealing study of the sexual and social behavior of 600 teenagers who came to New York City's venereal disease clinics during a 2-year period was completed during 1961. This study was conducted by the American Social Health Association in cooperation with the New York City Department of Health and financed by the Public Health Service. A limited edition of "Teenagers and Venereal Disease: A Sociological Study," the detailed report of these findings, has been published by CDC.

Inability to diagnose gonorrhea in the female has been an obstacle to the development of effective gonorrhea control programs. The

fluorescent antibody test has been adapted to the identification of the organism and is now being evaluated in field trials. Nine State health departments are using the Fluorescent Treponemal Antibody test to differentiate between biologic false positive reactions and those genuinely indicative of syphilis.

Evaluation of therapeutic agents indicates that penicillin is still effective in the treatment of syphilis. Some decrease in the susceptibility of the gonorrhea organism has been noted; however, a number of alternate antibiotics have been evaluated and are available.

Influenza

Acting upon recommendations of the Public Health Service Advisory Committee on Influenza, CDC mounted a campaign to stimulate the annual vaccination of high-risk groups against this disease. The elderly, the chronically ill, and pregnant women consistently account for a major portion of the excess influenza-associated mortality during epidemic periods.

The campaign was aimed at the medical profession and others responsible for the care of high-risk individuals. Its success was evident in the increased demand for vaccine.

CDC prepared and distributed nearly 40,000 copies of an Influenza Fact Sheet to Regional Medical Directors, medical specialty groups, medical journals, State health officers, pharmaceutical houses, and other interested groups.

Poliomyelitis

The changing trend in poliomyelitis incidence in the United States was brought more clearly into focus during 1960. Only two major epidemics occurred, one in metropolitan Providence, R.I., and the other in Puerto Rico. However, there were numerous moderate urban and rural outbreaks and several localized concentrations of cases throughout the country.

After the severity of the 1959 polio season, the dramatic drop in number of cases was particularly gratifying. Out of 2,218 paralytic cases reported to CDC's Poliomyelitis Surveillance Unit,² 57.6 percent were concentrated in totally unvaccinated individuals and only 7.4 percent occurred in fully vaccinated persons. The effectiveness of the Salk vaccine was thus reaffirmed.

A reversion to the infantile form of polio was seen, with 43 percent of the cases occurring in preschool children, peaking among one- and two-year olds. Also notable was the increased incidence in the 20- to 35-year age group.

² Best available count.

The Surgeon General's Polio Advisory Committee took these findings into consideration when it met at CDC in October and January. Prominent among the Committee's comprehensive recommendations for polio control were the intensified use of Salk vaccine as an immediate goal and of oral vaccine for use in curbing epidemics as soon as it should become available. The Committee endorsed the Public Health Service plan to encourage local community drives to reach lower socioeconomic and younger age groups through "Babies and Breadwinners" campaigns.

The first demonstration of an all-out community immunization effort was staged in Columbus, Ga., in cooperation with the State and county health departments. Although a preliminary Quota Sample Survey showed that this city of 120,000 population had a better than average immunization level, approximately 80,000 doses of Salk vaccine were given in three 1-week periods. As the program proceeded, it was documented step-by-step.

The Columbus campaign served as a prototype for others throughout the country. Community groups, the Advertising Council, and other organizations on the local and national level contributed talent, publicity, and manpower to the Columbus campaign and to others that followed it.

At the end of the fiscal year, when licensing of oral polio vaccine Type I appeared imminent, the President of the United States requested and Congress appropriated \$1 million to purchase oral vaccine as it was licensed. The supply is to be used to study the effectiveness of the vaccine in controlling epidemics.

Encephalitis (Arthropod-Borne)

Studies in Colorado have uncovered a link between warm spring temperatures and the transmission rate of St. Louis encephalitis (SLE) and between cool springs and western encephalitis. If these findings hold true elsewhere, a means may have been found for predicting outbreaks of encephalitis and the probable type. An unsuspected enzootic vector of western encephalitis may be spreading the virus in high altitudes. Chicken flocks, placed strategically to serve as sentinels of viral activity, have demonstrated a high rate of transmission of this virus even when the mosquito *Culex tarsalis*, the presumed vector, was essentially absent.

Tuberculosis

Many communities are hard pressed to provide clinic and outpatient services to tuberculosis patients, the majority of whom receive part, and sometimes all, of their treatment at home. The Tuberculosis Program made a special effort this year to help States with high case

rates and inadequate funds. By assigning professional workers, it enabled a number of areas to expand and intensify their services.

In demonstration projects, nurses' aids and specially trained investigators relieved public health nurses of routine tasks, freeing them for more professional functions. In another project, homemakers were employed to see if this would encourage patients to continue treatment.

A major research activity dealt with the identification of unclassified mycobacteria, which cause clinical disease similar to tuberculosis but do not respond to present drugs. More than 500 strains have been collected; 64 of these were subjected to tests in guinea pigs. Eleven new mycobacterial antigens were prepared and used for studies of human population groups, and others are now being developed. New findings from studies of tuberculin sensitivity and chemotherapy evaluation were reported and the large-scale study to determine whether isoniazid is effective in preventing tuberculosis was continued.

Plague

A new technique, involving fluorescein labeling, was developed for use in the field to permit immediate checks of dead rodents for plague infection.

Schistosomiasis

Field studies in Puerto Rico demonstrated the effectiveness of the predator snail *Marisa cornuarietis* as a biological control agent against the snail intermediate host of schistosomiasis, *Australorbis glabratus*. A chemical, acrolein, was found to be a good combined herbicide and molluscicide in Puerto Rico field tests.

VECTOR CONTROL

Aedes aegypti, the urban vector of yellow fever, is being eliminated initially in a 5-square-mile area of Pensacola, Florida, in a CDC project to determine the cost and feasibility of eradicating this species. Studies on the release of sexually-sterile adult male *Ae. aegypti* as an aid to eradication have been initiated.

Improved formulations of solid spontaneous vaporizers for DDVP have been developed for use in the residual fumigation method of vector control. Field tests of this method of controlling malaria mosquitoes, together with studies on the toxicity of DDVP vapor to humans, have been initiated in Upper Volta, Africa. The use of DDVP vapor for disinfecting aircraft while in flight has been found to be biologically feasible in tests on commercial planes. Studies have been started to determine if the vapor, as used in the tests, has any adverse effect on human volunteers.

LABORATORY SERVICES AND NEW TECHNIQUES

Nearly 56,000 disease specimens were referred for identification to the CDC laboratories by State and local health departments, by various Branches of the Center, and by Federal agencies other than CDC, research groups and foreign countries.

In addition to the amounts required in its own programs, the Center produced and distributed more than 155,000 ml. of diagnostic reagents, and over 12,000 shipment lots of tissue culture media to health departments here and abroad, to other Federal agencies, universities, hospitals, and research groups. These materials are not available commercially.

Conjugates for the nine important serotypes of enteropathogenic *Escherichia coli* found in the United States have been prepared and fully evaluated. Sensitivity and specificity were so encouraging that a field study was undertaken in San Juan, Puerto Rico, where incidence of infantile diarrhea is high. Additional work indicated by the study has been completed and the method now shows great promise for rapid diagnosis needed in the control of this disease.

Under an agreement with the Division of Chronic Diseases, a laboratory has been established to work out procedures for standardization of tests used in heart disease research and control. The first program of the new laboratory is a cholesterol program to support lipid epidemiologic research in public health laboratories. Fifty-two laboratories in the United States and Canada are participating in this continuing program which is designed so that others may join the program.

INTERNATIONAL COOPERATION

In collaboration with the World Health Organization, a reference skin test antigen for the diagnosis of schistosomiasis was prepared and distributed to workers in Japan, Philippine Republic, Africa, Lebanon, and India for evaluation. A protocol for the standardization of the skin test and methods for analyzing the results of these trials was prepared for use by WHO.

Under a cooperative agreement between the governments of Colombia, South America, and the Republic of Lebanon, with the Public Health Service, members of the Audiovisual Section of CDC surveyed and secured film footage on nutritional standards of the civilian and military population in those countries.

TRAINING

Nearly 6,000 persons from State and local health departments, Federal agencies, academic institutions, industry, and organizations attended 373 CDC courses in communicable disease control presented throughout the United States and at CDC headquarters. Over 26,000

audiovisual aids were loaned in response to requests, and more than 100,000 pieces of training literature were distributed. Two venereal disease control seminars were held which attracted an additional 1,300 persons. Thirty-seven training publications were prepared and 69 audiovisual productions were completed during the year.

Division of Accident Prevention

Accidents are the first cause of death from age 1 to 36 and fourth for all ages. The Division of Accident Prevention, established February 1, 1961, supports a broad program of research to identify human factors in accident causation which can be modified or compensated for. Its recent and ongoing activities include:

Cooperation with the Greater Cleveland Safety Council on a public action program over a full year beginning September 8, 1961, the first attempt of its kind in any metropolitan center.

Participation in a national seat-belt campaign launched by the Advertising Council of America.

Provision of seat-belt anchor points for at least two seat belts in all American 1962 cars, partly as a result of PHS activity.

A study in five rural Virginia counties to try to reduce accident rates through community organization and strong publicity. The results are being published as a valuable guide for other rural areas.

Participation in a program on fire deaths and injuries in Mississippi County, Ark. Injuries from fires dropped dramatically in 1 year. The State health department is extending the work on a statewide, permanent basis.

Other activities included sponsorship of a Conference of State Motor Vehicle and Health Officers which led to permanent committees to foster close cooperation of their departments on driver licensing, driver examinations for intoxication or drug addiction, and related medico-legal problems.

A conference on driver simulation projects brought together all interested disciplines and opened a campaign for a wide range of devices.

A successful Conference on Alcohol and Traffic Safety was held to compile all known facts on this subject.

The first textbook on accident prevention for physicians and health workers was published, with PHS cooperation, by the American Public Health Association.

The National Clearinghouse for Poison Control Centers, with 460 centers affiliated as of July 1, started pilot studies on preventing childhood poisoning.

A "safe medicine chest," developed in the Division, is being considered for production by several manufacturers.

Other interests include mouth-to-mouth resuscitation, emergency care of accident victims, accidents of aged persons, safety standards for home appliances, epidemiology of traffic deaths, and effective home inspection for fire prevention.

Division of Nursing

The Division of Nursing was established in September 1960 by combining the Division of Public Health Nursing with the Division of Nursing Resources. All major program goals and objectives of the two former divisions are being continued and expanded and new objectives will be added as new health programs develop. The Division is responsible for the continuing appraisal of nursing needs and available resources to meet these needs. It also stimulates the development of new resources and assists health agencies, hospitals and other institutions to make the most effective use of nursing services. This work is carried out through: (1) systematic collection and analysis of data on nursing needs and resources; (2) consultation to State health departments, and through them to local health agencies, on all aspects of nursing programs for which they are responsible; (3) consultation on the application of study methods, as requested, to health agencies, nursing organizations, hospitals, both voluntary and tax-supported, and others; (4) intramural studies to develop new methods of improving nursing practice; and (5) grant operations, both for advanced training and for research.

The Surgeon General's Consultant Group on Nursing, appointed this year and comprising 24 leaders from health professions, industry, and civic groups, is considering the Nation's nursing needs in order to make recommendations on the appropriate role of Federal and local governments and private agencies in the provision of adequate nursing care. The Division has primary responsibility for the preparation of materials and other staff services for this Group.

The Division also gave leadership in nursing and health through the Division Chief's service as an official adviser for the U.S. delegation to the 1961 World Health Assembly; loan of one nursing consultant to the World Health Organization for 3 months to prepare a nurse staffing guide for public health agencies; and loan of two consultants to universities to teach courses in nursing research.

SYSTEMATIC ANALYSIS OF NEEDS

In addition to the recurring biennial estimates of total nurse supply and the census of public health nurses, the Division has underway a series of related surveys and analyses to obtain information needed to guide program development. For example, the latest estimates re-

ported employment of 80,000 part-time nurses, but there was no information on the amount of time these nurses work annually. The Division is conducting a study to provide information on the work patterns of this important group. More than 6,000 questionnaires from a sample of these nurses were received and coded; data analysis will be completed in 1962 and a report published.

An estimated 200,000 professional nurses maintain a current license to practice although they are not actually nursing. These nurses could form an important corps to augment the national supply.

To determine the availability—readiness and willingness—of inactive registered nurses to return to nursing posts full- or part-time, the Division is undertaking an extensive survey of a sample of these nurses.

To provide data for the 1963 evaluation of the Professional Nurse Traineeship Program and other training activities, work was begun on the development of a questionnaire for use in obtaining detailed information on the present educational level of professional nurses and their potential for and interest in further preparation.

NURSING CARE OF THE SICK AT HOME

The Division continued to promote and encourage local health agencies in the development of programs to provide nursing care to sick and disabled persons in their homes. Vast expansion of home nursing services can be predicted as demands grow due to the increasing numbers of chronically ill who are best cared for in their own homes.

Technical assistance from both regional nursing consultants and headquarters staff has been accelerated because of the urgent need to develop these services in States which passed legislation including home nursing care for the aged as permitted under the 1960 Social Security Act Amendments. Assistance was requested on a variety of problems, such as the conditions necessary for the initiation of such a program, ways and means of recruiting and training personnel, organizational patterns for the new service, and ideas for publicizing this additional community resource.

One major administrative problem raised was the determination of costs of providing nursing care in the home as a basis for fee schedules. The Division assisted two States to develop workable cost procedures.

With the assistance of the regional nursing consultants, the Division of Public Health Methods, and the Bureau of Public Assistance, a statement, "Medical Assistance for the Aged and Nursing Services in the Home," was developed and distributed to both health and welfare agencies nationwide. It has proved to be helpful to health and welfare departments in the development of cooperative programs.

A countywide nursing care of the sick program including a hospital-health department referral system was launched by the Rockland County Health Department in New York. Funds to make this program possible were transferred to the Division by the Heart Program. Consultation for this program has been provided by personnel from the State Health Department and the regional nursing consultant, with overall direction by the Division.

Ten additional agencies were assisted with instituting work measurement procedures. In one State, procedures were adapted for application on a statewide basis.

NURSING SERVICES IN OUTPATIENT DEPARTMENTS

The hospital outpatient department has a significant position in total medical care programs. It plays a key role in early discharge from the hospital, in the expanding programs of home care, and in care of the ambulatory patient, often preventing hospitalization.

The Division has developed a method for improving nursing in an outpatient department through several interlocking studies designed to give a comprehensive picture of nursing services. These studies also afford a means of analyzing some aspects of patient experience, for example, patient "waiting" time, continuity of care between clinic and home, and patient teaching, which are influenced by the nursing administration of the outpatient department.

This year, arrangements were made to assist in making such studies at three university hospitals in the South which recognize the urgency of their own problems relating to outpatient care.

STATEWIDE STUDIES OF HOSPITAL NURSING

Studies of inpatient nursing units continue to be an effective tool for self-evaluation by demonstrating how hospital nurses can better spend their time in patient care. Approximately 200 hospitals have now studied nursing activities with consultation from the Division. Workshops to teach the study method were conducted in Indiana, California, and Pennsylvania, and consultation was given in Kansas and New Jersey. These last three States are planning studies on a statewide basis in cooperation with local hospital associations and other health organizations.

NURSING RESOURCES SURVEYS

Consultation was given six States during various stages of initial or reappraisal studies of their nursing resources. These were West Virginia, Montana, South Dakota, Louisiana, Kansas, and Mississippi.

Mississippi's reappraisal in 1959-60 pointed out that a contributing cause of their meager professional nurse supply might be the high

percentage of nursing students (more than 50 percent) who either withdrew or failed to pass the State licensing examination. The Division cooperated with representatives of the schools of nursing in conducting a study of over 1,000 students to determine the relationship between results on various pre-admission tests and the eventual success of students, both in school and in obtaining licenses. Findings were studied thoroughly by school representatives and the reappraisal committee in a three-day workshop and plans were made for better selection of students and other program improvements.

This study underscored the value of using high school grades and performance on admission tests as predictors of a student's success in a school of nursing. It also demonstrated the high cost of training poorly qualified students.

INTRAMURAL RESEARCH

Reports of two completed studies by staff members were published. These were *A Study of Student Nurse Perception of Patient Attitudes and Behavior Patterns of Premature Infants*.

In cooperation with the Boston Public Health Service Hospital, an experimental study of the comparative costs, durability, and acceptability of reusable and disposable surgical gloves showed that use of disposable gloves saved personnel time which could then be reassigned to activities more closely related to patient care.

A patient progress study was undertaken, designed to develop a technique by which public health nurses might define the health needs of patients and then measure response to each service given in terms of the ultimate goal the patient is expected to attain. This year, data were obtained from four agencies in Ohio, Wisconsin, and New York. Where the methodology has been tested, agencies have been enthusiastic about its usefulness in helping them focus on the patient's progress in relation to his problems. It is also considered to be an effective supervisory and self-evaluation tool.

An evaluation of the Children's Bureau demonstration of health services for migrant laborers in Florida is to be based on this study method, as are several other evaluation projects.

GRANTS FOR TRAINING AND RESEARCH

The Professional Nurse Traineeship Program, between September and March, awarded grants to 1,421 trainees through 94 schools, for long-term preparation in teaching, administration, and supervision. In the short-term training program, started last year, 117 short courses were approved and grants awarded to course sponsors in the amount of \$792,000. Over 4,200 trainees participated in these courses.

The Division is also responsible for consultative services to the Division of Community Health Services on nursing applications for public health traineeships and on project grants for graduate training in public health. Thirty project grant applications were approved for training nurses in public health; about 250 nursing applications for public health traineeships were reviewed and acted upon.

Through the Research Grants and Fellowships Program, a total of \$1,700,000 was awarded for 19 studies of importance to nursing and for 26 full-time predoctoral fellowships to as many nurses to prepare for independent research.

Project applications reveal a significant trend toward studies in clinical nursing as exemplified by a grant to study the relationship of nursing care to pain patterns following heart surgery. Approved projects deal with both hospital and public health nursing; nursing education and student health; nursing in other nations; patient teaching and activity patterns; maternal and child health; and assessment of nursing home care.

Division of Dental Public Health and Resources

The Division of Dental Public Health and Resources was established on September 1, 1960. Previously, responsibility for dental health activities had been divided between the Division of Dental Public Health and the Division of Dental Resources.

Dental diseases are the most prevalent of all disorders, but only 4 people in 10 receive dental care annually. Accumulated treatment needs alone are great enough to employ the dental force full-time for five years. To provide the needed care and direct programs of disease prevention, the nation must rely upon a dental force which has diminished in proportion to population for a generation.

RESEARCH AND TRAINING CENTER

In a major effort to reduce the time lag between the discovery and utilization of knowledge of dental diseases and their control, the Division obtained facilities in San Francisco for a Dental Health Center. The Center will be the first national facility to conduct applied research programs in the prevention and control of dental diseases and to train public health workers in the use of research findings.

CONTROLLING DENTAL DISEASES

The incidence of dental caries can be substantially reduced by the increased utilization of available and already proven methods of prevention. Through informational services and technical assistance to health departments, the Division encouraged the adoption

of water fluoridation, the most effective caries preventive. As of June 30, 1961, some 38,864,000 people in 2,008 communities were served by controlled fluoridation. An additional 7,000,000 lived in the 1,903 communities where the water is naturally fluoridated.

Preventive programs initiated included a study of the effectiveness of stannous fluoride dentifrices in preventing decay among school children and the field testing of fluoridators for use in homes utilizing individual wells. Continuing activities included projects for testing different concentrations of topical stannous fluoride solutions and studies of the practicality of fluoridating school water supplies in rural areas where central water systems are not used.

REMOVING BARRIERS TO DENTAL CARE

In any year 60 percent of the population do not receive dental care. The cost of dental services, physical conditions such as chronic, disabling illnesses which make it impossible for people to go for care, and psychological and sociological influences which make people fear or ignore the need for care are among the factors which bar people from needed services. Activities originated or supported by the Division are designed to eliminate these barriers.

Financing Dental Services

Privately sponsored prepaid dental care plans are effectively lowering the cost barrier and increasing the utilization of dental services. The Division encouraged the growth of prepayment by serving as an informational and consultative center for consumer groups and dental societies establishing prepayment programs. This year the revised "Digest of Prepaid Dental Care Plans 1960," summarizing the benefits, eligibility requirements, and other pertinent information on programs already in operation, was published. A collection of fee schedules used in various prepayment plans was prepared for publication.

An outgrowth of interest in prepayment has been the development of dental service corporations, nonprofit agencies through which State dental societies administer prepaid care plans. Under a cooperative agreement with the Michigan State Dental Association, the Division participated in the organization and administration of the society's service corporation, gaining practical experience which will be useful in assisting other dental societies.

Services for Special Groups

In most communities, facilities and programs to provide dental care for the chronically ill and aged, the mentally and the physically handicapped are nonexistent.

Three pioneering projects completed on June 30 produced basic data on dental care needed by the mentally and chronically ill and the aged and developed techniques and equipment for use in providing care for them. Two of the projects, at the West Virginia State Hospital in Huntington, W. Va., and at the Beth Abraham nursing home in New York City, will continue the treatment phases of those programs.

The third project, a 4-year study of dental care for the chronically ill and aged in Kansas City, brought dental services to both the homebound and nursing home patients. The prototype program demonstrated how community service programs can meet the dental treatment needs of a neglected group. One phase of the project, the training of dental students at the University of Kansas City School of Dentistry in the use of portable dental equipment and the special techniques of care for the aged and ill, will be continued by the dental school.

In cooperation with the State health departments of Idaho and Illinois, the Division initiated projects designed to assess the dental care needed by handicapped children. These projects will provide needed care and collect data necessary to the establishment of State and local service programs.

Indifference to the need for dental care and fear of treatment are reflected not only in the failure of individuals to utilize dental services but also in public apathy toward dental public health programs. Studies underway in the Division continued the attempt to ascertain why certain population groups make, or do not make, dental visits and why people join various financing programs.

DEVELOPING DENTAL RESOURCES

Activities aimed at increasing the utilization of dental services must be accompanied by the building of a dental force adequate to meet the greater demand for care. Within 30 years the national dentist-population ratio has declined from a high of 58 dentists per 100,000 persons to 46. Just to maintain the current ratio, the nation must double, within 15 years, its capacity to educate dentists. Greater numbers of dental auxiliary personnel must be recruited and trained, and ways to increase the productivity of the dentist developed and utilized.

Division studies in the space requirements and space relationships of dental schools were designed to learn how these facilities can be planned and constructed more efficiently and economically. The preparation of dental school planning guides undertaken this year should assure that new schools are built not only in accordance with

the most modern teaching concepts but with enough flexibility to be adapted to future innovations in curriculum and technology.

Educational Programs

The use of chairside assistants is an effective method of stretching available dental services, for it enables the dentist to treat more patients. An experimental program to teach dental students to work with chairside assistants, originally initiated under cooperative agreements with six dental schools, culminated this year in a grants program available to all schools. Already 40 schools have indicated that they will participate in the grants programs, administered by the Division for the National Institute of Dental Research, in the coming academic year. Seven technical and vocational high schools, junior colleges, and dental schools will participate in a continuing cooperative program, started in 1956, to establish standards for training chairside assistants.

ASSISTING OTHER HEALTH AGENCIES

Assistance to State and local health agencies in the planning of dental programs is a continuing activity. This year a comprehensive study of State dental health programs, covering administration, resources, and program content, was initiated. The survey will serve as a basis for formulating recommendations and establishing standards to be used in guiding the future growth of these programs.

Division of Water Supply and Pollution Control

Fiscal year 1961 was the 5th year of administration of the water supply and pollution control program under Public Law 660. At the end of the year Congress enacted major revisions to the Water Pollution Control Act, strengthening the Federal role and providing additional aid to State and local governments. Two events during the year also focused attention on the gravity of the water situation: the first National Conference on Water Pollution (December 1960) and the release in January 1961 of a report by the Senate Select Committee on National Water Resources based on a comprehensive two-year study.

The legislation amending Public Law 660 was signed by the President on July 20, 1961. It provides for: (1) intensified research and establishment of field laboratories; (2) inclusion of storage for water quality control in new Federal reservoirs; (3) extended and increased grants to States for their control programs; (4) liberalized and increased grants to further stimulate construction of municipal waste treatment facilities; and (5) broadened Federal enforcement pro-

cedures to abate pollution. The Act declares it to be the policy of Congress to "recognize, preserve and protect the primary responsibilities and rights of the States in preventing and controlling water pollution," pointing out that the Federal role is one of leadership and providing "technical services and financial aid to State and interstate agencies and to municipalities."

CONSTRUCTION GRANTS

During fiscal 1961 grants totaling \$45 million were approved for 590 municipal sewage treatment construction projects. During the entire 5-year period ending June 30, 1961, grants totaling \$225 million were made in support of construction totaling \$1.3 billion. Of the 2,746 projects approved, 1,580 were completed and 710 under construction. These will serve a population of 27 million and abate municipal pollution in over 33,000 miles of streams.

PROGRAM GRANTS

Grants to State and interstate agencies to assist them in establishing and maintaining adequate water pollution control programs have encouraged the States to increase their appropriations from \$4.2 million in 1956 to \$6.7 million in 1960.

BASIC DATA

To determine pollution trends, the National Water Quality Network of stream sampling stations was enlarged from 79 to 91, with 300 as the ultimate goal. Continuing data are collected, analyzed, and published on water and waste treatment facilities and needs. A reporting system on pollution-caused fish kills was initiated. An inventory of Federal establishments to determine the extent of, and remedial measures for, pollution coming from these installations is in progress and due for completion in July 1962.

ENFORCEMENT

The enforcement procedure has been invoked in 15 interstate water pollution situations under the 5-year program of the Federal Water Pollution Control Act. One new enforcement action during the 1961 fiscal year was initiated on the North Fork of the Holston River (Virginia, Tennessee). Additional steps in the enforcement procedure were taken in the following pending cases: the Bear River (Idaho, Utah, Wyoming); the Colorado and all its tributaries (Colorado, Utah, Arizona, Nevada, California, New Mexico, Wyoming); and the Missouri River, St. Joseph, Missouri. Also, as the fiscal year ended, preparations were near completion to hold a conference involving the

Raritan Bay (New York, New Jersey). Continuing files are maintained on some 2,000 additional pollution areas. Enforcement actions to date are effecting pollution abatement in more than 4,000 miles of streams. The resulting remedial measures agreed upon include waste treatment facilities to cost in excess of \$500 million.

RESEARCH AND RESEARCH GRANTS

Research continued at the Sanitary Engineering Center in problems of wastes origin, characterization, treatment and disposal, and in stream monitoring, water treatment, and the supplementation and conservation of water supplies. A major project in advanced waste treatment was undertaken to develop entirely new processes which will approach 100-percent purification of wastes. Direct responsibility was assumed for the support and administering of water supply and pollution control research grants formerly funded by the National Institutes of Health, and to support the training of urgently needed personnel through research fellowships and training and project grants.

COMPREHENSIVE PROGRAMS

The technical staff continued work in comprehensive river basin programming. New projects were initiated in the Columbia and Colorado River Basins and the Great Lakes-Illinois Waterway Basins. An earlier project continued in the Arkansas-Red Basin.

INTERAGENCY COORDINATION

Coordination of programs with water resources plans and projects of other agencies continued. Technical services under such inter-agency agreements represent a major and expanding activity. Thirty-eight evaluations of water supply requirements have been completed under the Water Supply Act of 1958 in conjunction with impoundments planned by the U.S. Army Corps of Engineers, and 48 others are in progress or scheduled. The Division has also provided staff technical services in support of the Department's membership in the Southeast River Basin Study Commission and the Texas River Basin Study Commission.

ADVISORY BOARD

Six meetings of the Presidentially appointed Water Pollution Control Advisory Board were held in fiscal 1961. In response to a request from the Surgeon General, the Board conducted a detailed study of existing program resources and projected future requirements in water pollution control.

Division of Air Pollution

On September 1, 1960, in recognition of increasing public concern about air pollution, the existing air pollution medical and engineering programs were combined in a single Division of Air Pollution. Following the approval, late in fiscal year 1960, of Public Law 86-493—which directs the Public Health Service to make a thorough study and report to Congress by June, 1962 on the health effects of motor vehicle exhausts—the Division has sharply accelerated its research in this area.

AUTO EXHAUST RESEARCH

The research projects set up to implement P.L. 86-493 involved complex procedures and required painstaking advance planning. By close of fiscal year 1961, however, many major studies were underway.

In one group of studies, colonies of experimental animals are being exposed in the laboratory to irradiated and nonirradiated motor vehicle exhaust and to concentrations of auto exhaust pollutants as they occur in the ambient air on city streets.

In six large cities, arrangements were completed for continuous measurement of exhaust-related gaseous pollutants to determine their ranges of concentration. In three cities, lead in the ambient air, and lead levels in the blood and urine of selected population groups, are being measured for correlation with traffic density and other parameters.

To help determine the pollutant contributions of gasoline- and diesel-powered trucks and buses, their operating modes are being surveyed in several cities. The particulate fraction of gasoline and diesel engine exhaust is also being analyzed for a variety of polynuclear hydrocarbons and oxygenates for correlation with analyses of potential carcinogens in emissions from other combustion sources. A cooperative survey is underway in Los Angeles to determine exhaust concentrations of hydrocarbons, carbon monoxide, carbon dioxide, and nitrogen oxides in a representative sample of registered motor vehicles under prescribed operating conditions.

The Division is also supporting, through its intramural research program and its research grants program, a number of other projects which should further help to determine the effects of motor vehicle emissions on human health.

OTHER RESEARCH ACTIVITIES

In 50 stations of the National Air Sampling Network, gaseous pollutants such as sulfur dioxide and oxides of nitrogen are now being sampled. Formerly, only particulates were sampled.

Further advances were made in designing and improving instruments for sampling pollutants or assessing their effects, for example, a portable transistorized particle counter and size analyzer. For industrial-type installations, improved filter devices were developed. Chemical research was oriented toward analytic methods for aromatic and aliphatic hydrocarbons and inorganic gases.

Special sampling for assay of potential cancer agents was conducted in six cities. The previously developed analytic technique for measuring certain potential carcinogens, particularly 3,4-benzpyrene, was applied to air samples of 103 cities and 28 nonurban sites; city levels averaged 16 times those found in nonurban areas. To further gauge the potential carcinogenicity of polluted atmosphere, the geographic distribution of lung cancer according to the histological type of tumor is being studied to test the theory that the different cell types may result from different causative agents.

The following are typical of many field studies of air pollution's health effects. Tests in a large industrial firm indicated a relationship between absenteeism due to certain respiratory diseases and total sulfate pollution in the air. Further study of results of a survey previously done in Nashville, Tenn., disclosed a similar association between asthmatic attacks and airborne sulfates. In studies of two small towns, which differed only in the degree of air pollution prevalent, preliminary analysis of data suggests corresponding differences in the residents' lung function and breathing capacity.

Laboratory studies on health effects were also expanded. In further animal studies, conjugated nitro-olefins were found to be potent irritants, with not only eyes and respiratory tracts affected but also circulatory and nervous systems. An especially significant study revealed that the resistance of mice to respiratory infection was markedly decreased after exposure to ozone, as demonstrated by increased mortality rate and lowered survival time. Pulmonary function tests revealed that human beings exposed under laboratory conditions to certain inhaled substances experienced reactions similar to those described in animals.

TECHNICAL ASSISTANCE AND TRAINING

Statewide air pollution surveys were completed, in cooperation with the State health agency, in Florida, Pennsylvania, and Georgia. Detailed reports were published on earlier surveys in Minnesota and North Carolina. Substantial assistance was also given in surveys conducted by State or local health departments in Hamilton, Ohio; Charleston, S.C.; Lynchburg, Va.; Washington, D.C.; and Berlin, N.H. Equipment loans or consulting services were provided to many other areas.

Intensive technical courses in air pollution were given at the Sanitary Engineering Center to 180 trainees from 32 States and 3 foreign countries. Two field courses were presented 6 times to 289 trainees. Support was also continued for the graduate-level air pollution curricula being developed at 10 universities.

NATIONAL GOALS

Late in calendar 1960, an important report was published: National Goals in Air Pollution Research. This report was prepared by a highly competent group of consultants outside the Federal Government, who were invited by the Surgeon General to identify goals for air pollution research over the next decade and to recommend a fair apportionment among the Federal Government, State, and local governments, and industry of the efforts necessary to reach these goals. The Division has set its sights accordingly.

Division of Radiological Health

The Division of Radiological Health is responsible for development and implementation of ways and means of controlling and, wherever possible, reducing radiation exposure. With the rapid multiplication of sources, applications, and users of radiation, it is imperative that the States assume increasing responsibilities for radiation protection and control. Therefore, particular attention is placed on providing technical assistance to bolster the radiological health competency of the States. Technical personnel from the Division are currently assigned as radiological health consultants to the Regional Offices and additional personnel have been assigned directly to State health departments.

A new mail survey technique (Sur-pak) has been developed for evaluating dental X-ray units used in private offices and clinics. The Division furnishes the State health departments with survey packets, which are then distributed to each individual dentist or organization in the survey area. After exposure of the film packets to the X-ray units, they are returned through the State Health Department to the newly developed Radiological Health Laboratory at Rockville, Md., for interpretation and report of findings back to cooperating offices.

The new Rockville Laboratory was established for the primary purpose of developing methods for the effective control of radiation hazards from medical, dental and industrial X-ray units as well as providing training in radiological health.

At the request of the Navy Department, the Division established a radiation monitoring station at the site of a proposed Navy Reactor

at McMurdo Sound, Antarctica. Public Health Service personnel assigned there are collecting background data from air, water, and algae samples in order to assure other nations that treaty requirements and safety regulations against contamination of the environment in that area are being rigidly observed.

RESEARCH

Fundamental and developmental research is being augmented in an effort to close the gaps of knowledge on the effects of radiation on man. An example of this effort is the "San Juan Research Project," where continuing studies are being made of selected families in that area, evaluating food and water relationships to ingestion and retention of radionuclides. Radon breath trailers have been obtained and construction of a radon air removal system is almost completed. Another project vital to a large segment of our population is the "Late Effects of Radioiodine Therapy Follow-up Study." The purpose of this study is to investigate the late effects of treatment with radioactive iodine among patients with thyroid diseases. Contracts have been signed with 16 hospitals to help conduct this work.

The extension of research activities through the medium of extramural grants by the Division was made possible for the first time during the 1961 fiscal year with a \$918,000 budget. Requested appropriations were \$1,198,000 for the 1962 fiscal year. These grants make possible use of laboratory and research facilities of universities, industrial organizations, and official and nonofficial agencies throughout the country.

TRAINING

Training grants were also made available for the first time in fiscal year 1961 by Congressional approval of an initial disbursement of \$500,000 to colleges, universities, and other institutions of higher learning, to improve, expand, or establish radiation health specialist curricula. Fifteen universities were selected, from applicants requesting almost \$2 million, to receive grants for staff, equipment, and student assistance.

During fiscal year 1961, short training courses in the health aspects of radiation exposure were attended by over 1,000 Federal, State, and local governmental officials, foreign students and representatives of industry and private agencies.

A Symposium on "University Curricula in Radiological Health," with more than 100 educators and public health officials in attendance, was held at Princeton, N.J., during the year under sponsorship of the Division. The symposium proceedings underscored the acute shortage of trained radiological health personnel at all levels of professional

competence. Nationwide radiation specialist training activities were revealed and clarified by this opportunity for an exchange of ideas on future planning.

SURVEILLANCE

The environmental radiation surveillance programs of the Division have expanded with the support of the Sanitary Engineering Center at Cincinnati, Ohio, and the regional laboratories at Las Vegas, Nev., and Montgomery, Ala. These regional facilities analyze environmental and biological samples collected by Federal, State, and local health authorities. Comprehensive data on radiation levels present in the surrounding environment, including air, water, milk and other foods are then published each month in the Division's "Radiological Health Data" periodical.

A Radiation Intelligence Network has been established with the purpose of assessing all sources of ionizing radiation in the environment. A computational group has been organized as part of this network. A pilot study of environmental radiation sources in Montgomery County, Md., is being conducted in cooperation with the county health department. Air sampling stations were installed in nine locations in the county. Samples of drinking water from public and private wells were obtained, and information about food intake and X-ray exposure was secured through household interviews. The primary purpose of the survey is to develop methodology and check the validity of methods for obtaining accurate records of total radiation exposure of a population group.

Division of Occupational Health

An increase of over 100 percent in direct operating funds for the Division of Occupational Health in fiscal year 1961 gave new thrust to research, consultation, and training activities to help meet more adequately the pressing needs in this complex field.

In the research area, this increase permitted expanded effort in the development of better techniques, materials, and equipment for use in the prevention, diagnosis, and treatment of occupational disease. Impetus was given to activity in toxicology and in related fields of clinical medicine, engineering, chemistry, and physics. Physiologic and psychologic factors in the work environment were also brought under study.

The Division also assumed responsibility for the administration of research grants in occupational health. To stimulate needed research, a conference was held to consider epidemiologic investigations that might profitably be developed in industry.

Field investigations conducted during the year ranged from silicosis among metal miners to the possible health effect of handling animal feeds containing a wide variety of additives.

The findings of a recently completed study will aid in establishing standards for conditions under which men can be employed for their entire working lifetime without developing hearing impairment due to excessive noise.

In the study of uranium miners, now in its 12th year, more conclusive evidence points to a lung cancer hazard. Among miners with more than 3 year's underground experience, deaths are occurring in excessive numbers due to this disease. As part of the triennial examination of 1,700 uranium miners, cytologic analyses of the sputum were made to determine their value in the early detection of lung cancer. Contracts were also negotiated with the States of New Mexico and Colorado and with private research facilities to complement the clinical studies and control efforts.

Further attention to the problem and the need for effective control measures have been directed by special meetings and training courses. Among these, a meeting called by the Secretary of Health, Education, and Welfare brought together the governors and other officials of the seven uranium-mining States. Heads of State mining associations and governmental agencies concerned also met to consider action. In addition, 3 courses for 200 uranium mine and mill operators and monitors were conducted by the Division, and over 10,000 copies of an educational pamphlet were distributed to mine personnel.

Studies of the mechanism of toxic stress included a continuing evaluation of the long-term effects of toluene diisocyanate (TDI), a chemical responsible for strong immunologic reactions.

Dermatitis studies of epoxy, polyester, and polyurethane resins have led to the development of nonirritating patch testing concentrations and diluents as a diagnostic aid in distinguishing between allergic and primary irritant dermatitis.

As part of an intensified training program 15 separate courses were presented with a combined attendance of 435 persons. Basic 2-week training courses for industrial hygiene engineers and chemists, for many years offered once annually, were presented four times. In addition, four advanced courses in lead analysis, analysis and control of noise, analysis of free silica, and dust evaluation techniques were offered. Special courses were held for various groups, including governmental occupational health directors and local health officers.

During the year, field consultations and technical services were provided on over 100 different occasions in 30 States.

Division of Environmental Engineering and Food Protection

This newly organized division takes over most of the functions performed by the former Division of Engineering Services. These include the milk, food, and shellfish sanitation programs; the water supply, food service, waste disposal and general sanitation problems of interstate carriers; metropolitan planning and development, solid waste (refuse) disposal; and a variety of general sanitary engineering activities. The division carries out and supports research, training, technical assistance, standards development, equipment review, program planning and promotion and regulatory functions under the Interstate Quarantine Regulations.

ENGINEERING RESOURCES AND TRAINING

The Public Health Service, because of its expansion of environmental health programs, has been acutely affected by the manpower shortage in these fields. Consequently, major activities of this unit have involved the recruitment of qualified personnel for all divisions that are working on environmental health programs and the development of current staff through on-the-job training and through assignments for specialized studies in colleges and universities.

To advance research on environmental health problems, assistance was given to the National Institutes of Health in evaluating and awarding grants for the construction of research facilities, particularly in schools of engineering.

GENERAL ENGINEERING

In carrying out PHS regulatory functions under the Interstate Quarantine Regulations, Special Citations and Letters of Commendation for excellence in sanitation were awarded to 13 railroads and 43 vessel companies. Certificates of Sanitary Construction were issued to newly built aircraft, vessels, and railroad dining cars. The "List of Accepted Equipment" for Interstate Carrier use was increased by 503 new items. Modification prior to acceptance was required on 32.

Studies of water pollution by vessels operating on the Great Lakes were intensified and areas were designated where vessels now are prohibited from discharging wastes.

Technical assistance in metropolitan planning was given to Fort Wayne, Ind.; Omaha, Nebr.; and Lake County, Ill. A new technical manual dealing with metropolitan planning for environmental health was published as were other manuals dealing with individual water supply systems, refuse sanitation, sewage disposal, school sanitation and mobile home parks. The PHS-sponsored Committee on

Plumbing Standards completed proposed changes in the National Plumbing Code.

Organic chemical analyses by PHS established for the first time the occurrence patterns of these chemicals in finished water with a view toward relating it to chronic disease incidence. Work was intensified on the role played by water supply in the spread of infectious hepatitis.

MILK AND FOOD PROGRAM

Participation by States in the Cooperative State-PHS Program for the Certification of Interstate Milk Shippers increased for the ninth consecutive year. The July 1961 list of milk shippers who were complying with PHS sanitation compliance ratings contained the names of 752 firms in 37 States and the District of Columbia. Over 1,400 shippers were certified by producing States as meeting the sanitary requirements for the interstate shipment of shellfish.

During the year, some of the cases in two outbreaks of infectious hepatitis were associated with the consumption of raw oysters and clams harvested from sewage-polluted waters. The Service is assisting States to strengthen their shellfish sanitation control programs to prevent recurrences.

Research at the Sanitary Engineering Center shows that the levels of strontium-90 and cesium-137 in raw milk continued to decline during fiscal 1961. A method has been devised for removing strontium-90 from milk by ion-exchange resins. A pilot project, cosponsored by the Public Health Service, the Department of Agriculture and the Atomic Energy Commission has been established at Beltsville, Md.

Substantial progress has been made in the development, evaluation, and standardization of microbiological and biochemical methods for the examination of shellfish, milk, and other foods.

Technical assistance was given to all States and to industry on interpretation and application of PHS ordinances and codes, planning and administration of milk and food programs, sanitary design of milk and food equipment, and training of State and local health officials. More than 120 seminars and training courses on milk, food and shellfish sanitation attended by over 6,000 individuals were sponsored or participated in by PHS engineers.

Bureau of Medical Services

The hospitals, clinics, health centers, and other health services operated by the Bureau of Medical Services are in 250 locations on land and on the sea—in the Arctic and Antarctic, in the United

States and in foreign countries, on the Atlantic and the Pacific. Almost 13,000 personnel are engaged in the operation of the activities of the Service that provide direct health services to a wide variety of Federal beneficiaries.

The purpose in building marine hospitals many years ago was to care for merchant seamen who became ill or suffered injuries on their long voyages and could not go back to their homes and families on reaching port. Today, medical and hospital care for American seamen, and other direct health services to safeguard the Nation's strength, are provided by the Bureau of Medical Services.

Millions of travelers—U.S. citizens and people from other countries—arrive here each year from foreign points; through the foreign quarantine program, they are checked against any doubt of contagious disease. American Indians and natives of Alaska are given comprehensive health care through the Indian health program because they are not yet ready to provide it for themselves. Protection of the health of the men of the Coast Guard and the Coast and Geodetic Survey, and the cadets at the Coast Guard Academy, has long been a responsibility of the Bureau.

Members and retired members of the armed forces and their families receive care at hospitals and clinics of the Bureau where more convenient than military hospitals; in turn, commissioned officers of the Public Health Service may receive care in military facilities.

Medical and hospital care for civilian employees of the Government who are injured on duty or become ill from causes related to their jobs is administered by the Bureau. In another program, it operates health units for a number of Federal departments and agencies that have requested this help in protecting the health of their employees.

A special hospital is devoted to treatment of leprosy. Treatment for narcotic addiction is offered in two neuropsychiatric hospitals. The Bureau is responsible for medical and hospital care in all the Federal prisons and correctional institutions throughout the country.

The Bureau conducts clinical research and carries on training programs for medical and health personnel.

Public Health Service Hospitals and Clinics

The Division of Hospitals provides medical care for American seamen and other groups designated by Congress as beneficiaries of the Public Health Service. This nationwide program which now encompasses treatment of patients, professional training, and clinical investigations, was begun in 1798 with legislation establishing the old Marine Hospital Service, forerunner of today's Public Health Service.

About 375,000 persons qualify for health care benefits offered by the hospitals and outpatient facilities of the Division. Besides merchant seamen, the patients include officers and enlisted men of the U.S. Coast Guard, officers and crew members of the U.S. Coast and Geodetic Survey, commissioned officers of the Public Health Service, civilian employees of the Federal Government injured in the line of duty, active and retired members of the Federal uniformed services and their dependents, and several other groups. Persons with leprosy and narcotic drug addicts as defined by Federal law receive care in special hospitals.

In 1961, the Division operated 15 hospitals and 25 outpatient clinics; also 113 outpatient offices operated on a part-time basis by community physicians under contract with the Public Health Service.

VOLUME OF SERVICES

Inpatient admissions to the 15 hospitals in 1961 totaled 49,571—a decrease of 1.8 percent under 1960. There were 803 babies born in the two hospitals that have obstetric services. The average daily inpatient census declined 5.2 percent to 4,735. Outpatient visits rose slightly to a total of 1,194,486.

GENERAL HOSPITALS

Admissions to the 12 general hospitals totaled 45,147—male and female patients of all ages with a variety of health problems. These hospitals offer general medical and surgical services, and each has an active outpatient section. They are located in major port cities: Boston, New York, Baltimore, Norfolk, Savannah, New Orleans, Galveston, Memphis, Chicago, Detroit, San Francisco, and Seattle.

Among merchant seamen and coastguardsmen, who make up the larger part of the patient census, the five leading causes of admission are diseases of the digestive system, accidents, diseases of the genito-urinary system, respiratory conditions, and diseases of the bones and organs of movement.

The hospitals participate in mercy missions following local disasters. In October 1960, the Service Hospital in New Orleans in answer to a distress call mobilized its emergency resources and detailed a physician to the scene of the collision of the ALCOA CORSAIR and the LORENZO MARCELLUS in the Gulf of Mexico; nine persons were admitted in the hospital. The hospital on Staten Island, N.Y., ministered to victims of the airplane collision over lower New York City December 16, 1960.

In December 1960, the Staten Island PHS Hospital demonstrated the installation and operation of the Civil Defense Emergency Hospital for 80 leading hospital administrators from all parts of the

United States. This exercise took place in an essentially unoccupied building 15 miles away by road and ferry. The Civil Defense Emergency Hospital, one of 2,000 stockpiled throughout the country for use in emergencies, was uncased and ready to admit cases in 35 minutes. Treatment was under way for "stand in" patients within 1 hour. Popularly called "Operation Life," the demonstration was conducted in cooperation with the Division of Health Mobilization of PHS, the Office of Civil and Defense Mobilization, and the American Hospital Association.

NARCOTIC ADDICTION

The U.S. Public Health Service hospitals in Lexington, Ky., and Fort Worth, Tex., are neuropsychiatric hospitals devoted primarily to the treatment of narcotic addiction as defined by Federal law. They also admit patients with mental illnesses who are entitled to care as beneficiaries of the Federal Government.

In 1961, these hospitals admitted 4,424 patients—a 4 percent decrease from the previous year. The number of narcotic addict patients admitted was 3,939—a decline of 5.4 percent. Admissions of other patients increased 9.2 percent. The average daily census of 1,907 was about the same as in 1960.

Narcotic drug addicts are admitted for treatment as Federal prisoners, as Federal probationers, or as voluntary patients. In 1961 the 3,364 voluntary patients accounted for 74 percent of the total admissions but for only 28 percent of the average daily census. This comparison illustrates the inclination of addicts to stop treatment before they derive sufficient benefit from it.

Staff members of both hospitals participated in conferences, workshops, seminars, and meetings called by agencies in several States. The hospitals received several hundred visitors from the United States and foreign countries; of these, about 50 physicians and public officials were given orientation and training for extended periods.

LEPROSY

The U.S. Public Health Service Hospital in Carville, La., an internationally recognized center for treatment, training, and study concerned with leprosy and its many allied problems, admitted 103 patients in 1961 compared with 85 the year before. The average daily inpatient census rose from 281 to 285.

The benefits of modern therapy, notably the sulfone drugs, for leprosy are most marked in patients in whom the disease is diagnosed early. To gain these advantages for the patient, the hospital recognizes the need to intensify epidemiological studies in various States.

A full-time physician has been assigned to establish and coordinate this service.

Since the discovery and trials of the sulfone drugs for the treatment of leprosy at the Carville hospital, the prognosis is more optimistic in cases treated with them in the early stages. However, the sulfones are not 100-percent effective. Better drugs are needed, and large gaps exist in the scientific knowledge of leprosy. Research activities at Carville include clinical appraisal, biochemistry, bacteriology, therapeutics, and histopathology studies.

During the year nearly 10,000 persons visited Carville, 1,065 of whom were medical personnel. Twenty-three States were represented by 554 physicians and 404 nurses, and 107 professional visitors came from 19 foreign countries. Also, about 50 organizations and schools sent groups to the hospital for orientation, tours, and demonstrations. A hospital volunteer program was activated, and 17 persons from Baton Rouge and other nearby communities offered their services.

Dr. Robert G. Cochran of London, Advisor in Leprosy to the Ministry of Health of England and one of the world's outstanding leprologists, spent 2 months in Carville as consultant to the staff. During his stay, about 60 leading scientists and public health officials from the United States and other countries gathered at the hospital for a conference on research in leprosy.

MEDICARE

The Dependents' Medical Care Act of 1956 authorized U.S. Public Health Service hospitals and outpatient clinics to admit active-duty and retired members of the Federal uniformed services and their dependents and the dependents of deceased members of these services. Admissions of these patients to Public Health Service hospitals totaled 15,771 in 1961—an increase of 524 over 1960. The average daily census of these patients was 636, the same as the year before. They made 426,573 outpatient visits, a 3.2 percent increase.

The daily census of PHS patients in hospitals of the Department of Defense averaged 143, while the number of Defense Department beneficiaries in PHS hospitals averaged 275.

TRAINING OF PERSONNEL

Nearly 300 physicians, dentists, pharmacists, and dietitians received internship or residency training in the hospitals in 1961.

Ten hospitals are approved for graduate medical training by the American Medical Association, Council on Medical Education and Hospitals. Residency training is offered in 13 medical specialties—anesthesiology, dermatology and syphilology, general practice, general surgery, internal medicine, obstetrics and gynecology, ophthal-

mology, orthopedic surgery, otolaryngology, pathology, psychiatry, radiology, and urology.

Nine hospitals have American Dental Association approval for internships in dentistry. Residencies in prosthodontia and oral surgery are conducted at the Service hospitals in Seattle and on Staten Island, respectively. The outpatient clinic in New York City has an approved rotating dental residency.

The chief of the medical service in the hospital in San Francisco was appointed assistant clinical professor of medicine at the University of California Medical Center. Six staff members of the hospital in Lexington were appointed to the voluntary faculty of the new medical center at the University of Kentucky. About 50 medical and dental officers on Public Health Service hospital staffs also were teachers at nearby medical and dental schools.

The approved 1-year course in medical record library science conducted at the Service hospital in Baltimore graduated 8 students, bringing to 66 the number trained in this course during 10 years of operation.

Affiliations with colleges and technical schools afforded practical experience and clinical instruction to more than 100 graduates in physical therapy, occupational therapy, vocational therapy, social service, medical technology, and dental hygiene. The hospital on Staten Island provided the clinical nursing portion of the hospital corpsmen training given by the Coast Guard.

CLINICAL INVESTIGATIONS

Research in U.S. Public Health Service hospitals is predominantly clinical, closely linked to the total hospital program and the primary responsibility of providing good patient care. A number of investigations conducted at the hospitals are associated with research activities of outstanding scientific institutions such as the medical schools of Tulane University, New Orleans, and the University of Washington, Seattle.

Studies in the special hospitals chiefly concern the various health and social aspects of narcotic addiction and leprosy. The Addiction Research Center of the National Institute of Mental Health, located at the Lexington hospital, is recognized as one of the best in the world and is visited by many scientists from many countries each year.

Established research programs were under way in 1961 at seven general hospitals. More than 60 projects were in progress. Full-time directors of research were on duty at Staten Island, New Orleans, and San Francisco.

Support for research comes from the operating funds of the Division of Hospitals, from NIH research grants, or through a cooperative

arrangement between a Service hospital and a medical school. An instance of the latter is the research on the dilated heart which is being conducted by the hospital in New Orleans and the Tulane medical school. The May 1961 Bulletin of Tulane University Medical Faculty was devoted almost entirely to the working relationship between research activities of the Public Health Service New Orleans Hospital and Tulane University Medical School.

Research on essential hypertension, conducted in seven of the hospitals, is financed by an NIH grant.

Plans were under way as the year ended for research in the San Francisco hospital by the hospital staff and the heart disease control program of the PHS Division of Chronic Diseases.

FEDERAL EMPLOYEE HEALTH PROGRAM

Health protection for Federal employees was first seen as a responsibility of management in 1914 when the Treasury Department established a "relief room" in the main Treasury building. Today, after passing through stages of "emergency rooms" and "first-aid stations," an employee health service has been developed which includes preventive health programs with professional responsibility vested in a physician in charge. The Federal Employee Health Program, a part of the Division of Hospitals, operates health units for Federal agencies that request this service; the work is done on a reimbursable basis.

In 1961 the program continued the growth and development which started 2 years before. Five new units were added, bringing the total to 37. These units serve more than 57,000 employees and are contracted for by 167 agencies. Medical officers, full-time or part-time, were on the staffs of 31 units.

Health maintenance examinations for personnel age 40 and older were given to 3,832 employees, compared with 1,753 in 1960 and 348 in 1959.

Nearly 61,000 immunizations were given, including 41,798 for influenza and 13,857 for poliomyelitis. There were 16,971 tests made for diabetes, 3,818 tests for visual acuity, and 1,505 tonometric tests for glaucoma.

There were 243,356 visits to the health units. More than two-thirds of the 57,000 employees covered visited the units, and their average number of visits was 6.6.

One of every 12 visits to health units resulted in a referral to a private physician or dentist. More than 300,000 treatments were given employees at the units; about 1 of every 5 treatments was prescribed by a private physician.

FREEDMEN'S HOSPITAL

During 1961, Freedmen's Hospital provided care for 15,163 inpatients, a record high for its 96 years. A total of 3,379 live births also set a new record for the hospital, topping 1960 by 10 percent.

The 14,809 inpatient admissions represent a 6 percent increase over 1960. Average daily patient census at 375 was up 22. Outpatient visits declined 626 to 94,788 due to severe local winter weather conditions which prevented many patients from coming to the clinics for their appointments.

Inadequacies of the hospital's physical facilities caused numerous operating problems in ministering to the increased volume of patients. Excessive crowding frequently occurred in the medical, obstetrical and newborn services.

The attending and consulting staff of physicians and dentists totaled 213, an increase of 24. The courtesy staff consisted of 115, 8 more than the 1960 roster.

All training accreditations of the hospital were maintained during the year. Freedmen's Hospital serves as the clinical teaching resource for junior and senior students of Howard University, College of Medicine. It also offers approved medical, dental, pharmaceutical, and dietetic internships and residency training in 14 medical specialties and in hospital administration. There are also a school of nursing and a school of X-ray technology.

The 50 available residency appointments at Freedmen's Hospital were filled during the year and involved participation by 18 graduates of foreign medical schools. There were also 22 medical interns, 2 dental interns, 2 pharmaceutical interns, 10 dietetic interns and 12 research fellows.

The School of Nursing graduated two classes as a result of its curriculum being changed from 36 to 33 months. The combined number of nurses completing training was 44, raising the grand total of the school's graduates to 1,445.

The School of X-ray Technology continued its efforts toward refining its curriculum, clinical practice and other component activities. The 10 1961 graduates of this 2-year course bring the school's total to 50.

Over 35 clinical research projects were in progress at Freedmen's Hospital during the year. More than 40 scientific articles by staff members had either been published or were in process of being published.

Legislation authorizing the transfer of Freedmen's Hospital to Howard University was pending in the 87th Congress at the end of the year. (This legislation was approved on September 21, 1961.)

Freedmen's Hospital again benefited greatly from the many voluntary organizations that have given long and faithful hours of service to the institution and also from the organizations and individuals who made tangible donations for the benefit of the patients. The hospital for the second consecutive year participated in the Junior Red Cross Volunteer Program for the summer months. Sixty young ladies and one young man gave a total of 4,495 hours.

Division of Foreign Quarantine

The United States experienced its 14th year of freedom from outbreaks of quarantinable disease known to have been introduced from abroad.

QUARANTINABLE DISEASES

In Europe, however, quarantinable disease was introduced into countries by international travelers. Smallpox infection was imported by airplane passengers into Moscow, into Ansbach in West Germany, and into Madrid. Only in Moscow was the infection advanced far enough on arrival to permit prompt detection of the disease and application of control measures. Fifty-two passengers were isolated in Moscow for 2 weeks; no secondary cases occurred. In Ansbach, a young man who had been in Calcutta came home and worked in a photography shop for a week before becoming ill. Another week passed before he was hospitalized. The illness was correctly diagnosed as smallpox after further study. The man recovered. His mother, father, and a physician contracted smallpox and the mother died. The father and the father's physician recovered. In Madrid, there were 16 cases of smallpox with 3 deaths, including the infected young girl who had returned by plane from Bombay.

These events stress the importance of a careful check on the health and immunity of persons arriving at U.S. ports. World travel by jet plane increases the chances that a person without adequate immunity may contract smallpox and enter the country before symptoms develop. There is need to strengthen secondary defenses against spread of infection by improving and maintaining the immunity status of the population to the greatest extent feasible, particularly among port and transportation personnel and medical personnel who are in the most danger of exposure. Also, the possibility of smallpox infection should be considered if symptoms that may indicate the disease appear in a person who has recently been in a foreign country.

Worldwide, the total number of smallpox cases in the calendar year 1960 was about 62,115, which was fewer than in the previous year,

but the disease continued to be endemic in countries of Asia and Africa and in a few countries of South America.

For the first time in 2 years plague was reported in an international port—Rangoon, Burma—where two human cases and two infected rats were reported. This provided warning that rodent control on ships and in ports must not be neglected. Additional warning was furnished when two cargo ships operating between the Gulf coast and Puerto Rico were voluntarily fumigated; more than 800 rats were killed in one ship, and more than 400 in the other. Epidemics of human plague continued to occur in areas where infection was present in rodents; the countries included Bolivia, Brazil, Ecuador, Peru, the Congo, and the Union of South Africa.

One death from plague occurred as a result of infection from wild rodents in an isolated mountainous area of New Mexico. Epidemiological investigation and control measures were instituted.

Until the past year cholera had been confined to India, East Pakistan, and Burma. In July 1960 it became explosive in West Pakistan, where it had not occurred since 1958. In August it spread to Afghanistan, which had not had a cholera outbreak in more than a decade. Several months elapsed before the outbreaks were brought under control. India experienced a major cholera epidemic in several states and in the ports of Calcutta and Lucknow. An epidemic occurred in Burma. The disease was reported in Nepal.

Yellow fever, which had been quiescent for a few years in former endemic areas, was believed to have become explosive in a southwest province of Ethiopia; 3,000 deaths from a disease believed to be yellow fever were reported there in April 1961. Peru had a yellow fever epidemic early in 1961. Sporadic cases were reported by Bolivia, Brazil, Colombia, Venezuela, and the Congo.

OTHER COMMUNICABLE DISEASES

There was a recrudescence of meningitis (cerebrospinal) in Nigeria. It spread to Niger, Chad, and the Sudan. Several thousand cases were reported. Pilgrimage traffic in temperatures as high as 117° F. contributed to spread of infection.

Influenza epidemics occurred in England, Wales, Ireland, Japan, American Samoa, and the Philippines. The A-2 virus was isolated in England and Wales, and the B virus in Japan.

Psittacosis was found in a parrot from a shipment of 12 psittacine birds imported by a zoo in New Orleans. Several persons who had contact with the birds after they arrived in this country were notified. The other birds in the shipment were destroyed.

INTERNATIONAL TRAFFIC

Inspections of aircraft for quarantine or immigration-medical purposes decreased from 70,383 in 1960 to 65,661 in 1961. The increased use of larger aircraft was shown by an 11.6-percent increase in quarantine inspections of persons arriving by air, from 2,165,664 to 2,417,238. Inspections of ships decreased from 33,180 to 32,105. Quarantine inspections of persons arriving by ship decreased from 1,967,997 to 1,966,580.

Persons subject to quarantine inspection arriving in the United States by all modes of travel, including land entry from the interior of Mexico, increased from 5,186,789 in 1960 to 5,607,218 in 1961. It was necessary to detain only 11 persons in isolation, compared with 37 in 1960. The number of persons who were allowed to continue to their destinations in the United States, but were subject to medical surveillance for a time, was 91,985 compared with 54,459 in 1960.

MEDICAL EXAMINATIONS

General program.—The number of alien applicants for visas who were examined by medical officers abroad increased 6.8 percent, from 173,402 in 1960 to 185,142 in 1961. They were mostly immigrants. There were 1,850 who were found to have diseases or conditions excludable under immigration law. Aliens examined on arrival at United States ports increased 6.4 percent, from 2,945,264 to 3,132,313. There were 2,193 found to have excludable diseases or defects; 30 percent of these had been so diagnosed abroad, but they were admitted under special provisions of immigration law.

Staff in Europe examined 7,056 refugee-escapees under Public Law 86-648, and 243 were found to have excludable conditions. Some with excludable conditions were admitted to the United States by the Immigration Service subject to necessary controls.

Twenty-seven aliens arrived in New York with negative reports of serologic tests for syphilis but had positive tests upon reexamination. Investigation in the country they came from revealed that visa applicants obtained negative reports from friends who were laboratory technicians. In another country, tuberculous applicants substituted negative X-ray films for positive films. Corrective steps were taken in both countries.

Immigration of aliens with tuberculosis.—Immigration of certain aliens with tuberculosis continued for the fourth year under Public Law 86-253. The U.S. quarantine service placed 929 aliens under health controls after arrival in this country, compared with 794 in 1960.

Migratory farm labor.—In the program of recruiting farm workers from Mexico, 305,574 laborers were examined, with 5,634 rejections,

at 3 centers in Mexico; and 338,751 examinations were made, with 4,170 rejections, at 5 border reception centers in the United States. At the reception centers 300,736 serologic tests for syphilis were made, with 15,646 positive reactors. The rate of positive reactors increased from 49.7 per 1,000 men tested in 1960 to 52 per 1,000 in 1961.

Facilities at reception centers were improved and expanded to speed up X-ray and serologic tests. New type X-ray equipment permits the processing of films in about one-third of the former time.

ENTOMOLOGY AND SANITATION PROGRAMS

Action was completed to remove the following States from the yellow fever receptive area: Arizona, New Mexico, Oklahoma, North Carolina, and the part of Texas west of a line from Del Rio to Wichita Falls. The change was possible because of elimination of *Aedes aegypti* mosquitoes in these areas.

Aedes aegypti control was pursued with vigor and continued success at international traffic points in the yellow fever receptive area in the South, in Puerto Rico, and in the Virgin Islands.

A report was published reviewing the insect control problem on aircraft arriving in this country during the past 13 years, with particular reference to mosquitoes. Nearly a quarter of a million insects were intercepted during that time, with a yearly average of 19,175. More than 20,000 were mosquitoes, comprising 11 genera and 92 species, including many medically significant and nonindigenous forms. These findings point up the importance of continuing insect control in international traffic.

Entomological contributions to human welfare through the Public Health Service were reviewed in another published report, which points out the important role played in the Service's development by medical entomology and by arthropod-borne diseases such as yellow fever, malaria, typhus, plague, and Rocky Mountain spotted fever. Foreign quarantine is closely concerned with entomology, since the quarantinable diseases except smallpox and cholera are transmitted solely or chiefly by insects, and cholera is sometimes so transmitted.

Studies were made on control of insects on aircraft leaving the United States, a procedure of special interest to other countries that have been freed of mosquitoes at great expense.

A landmark in United States quarantine operations was reached in 1961 when ship fumigations by quarantine personnel were discontinued. Commercial facilities are now used for any necessary fumigation. The procedure is seldom required because of general improvement in the world plague situation. This resulted from more extensive ratproofing of ships (an important development in which the United States took the lead), the use of rodent poisons less dan-

gerous than fumigation with deadly hydrocyanic acid gas, and more extensive use of rat-trapping practices at sea and in ports.

Food sanitation on foreign-flag passenger liners, a program for which the Division of Foreign Quarantine has particular responsibility, has shown steady improvement.

The International Sanitary Regulations, issued by the World Health Organization, require every port and airport to be provided with a supply of pure drinking water. At the request of the Division of Foreign Quarantine, the World Health Organization is asking each country how the water quality is determined. Samples are taken from ships arriving at United States ports. Contamination is occasionally found, requiring correction.

OTHER QUARANTINE ACTIVITIES

The Surgeon General removed Cuba from the list of quarantine-exempt areas in January 1961 because the Public Health Service no longer had direct access to health information in Cuba.

The Miami area staff faced the problem of inspecting Cuban refugees landing at numerous points. Many arrived in small boats, which often failed to reach shore under their own power; persons were picked up by other vessels, or the boats were towed in by the Coast Guard. Immigration officers helped arrange for refugees to receive inspection and vaccination by quarantine officers. One person being treated for sunburn was X-rayed by the Refugee Center and found to have far advanced tuberculosis. A small boat carrying several starving refugees came to the Miami quarantine station dock; they were given food and water by a quarantine inspector living on the station.

A survey was made among sample groups of travelers arriving in the United States by plane to find out the countries they had visited, in addition to the country of emplaning, during the 14 days before arrival. It was found that many passengers had embarked for the United States on planes in uninfected countries but had been traveling in countries where quarantinable diseases were present. If unvaccinated, these persons can introduce dangerous diseases into the United States.

To expedite international travel and help ensure personal and public health protection, the Public Health Service published a series of popular leaflets giving immunization information for international travel and containing general health hints.

Health Services for Indians and Alaska Natives

A 12-year-old Navajo boy with acute rheumatic fever has a good chance to grow up and lead a normal life because of the services

available at the PHS Indian hospital opened in Gallup, N. Mex., in March 1961.

The pediatric-cardiac clinic at Gallup, where the pediatrician in Shiprock Indian Hospital 93 miles away sent the boy, is one of numerous medical specialties at the new 200-bed, \$4 million hospital. The Gallup hospital is a "first" in the Indian health program: the first hospital specifically planned to be a referral and consultative center for difficult medical cases emanating from Indian health facilities in a surrounding area. The territory served is the 25,000-square-mile Navajo Reservation and the Hopi and Zuni Reservations in Arizona and New Mexico.

About 380,000 Indians and Alaska Natives look to the Indian health program for preventive and curative medical services: 337,000 Indians living on or near some 250 Federal reservations in 24 States, mostly west of the Mississippi; and 43,000 Alaska Natives (Aleuts, Indians, and Eskimos) in hundreds of villages in Alaska.

Living for the most part in cultural isolation, these peoples for generations have not been exposed to modern medicine, or have resisted it. Social and economic conditions are depressed. The lack of adequate and safe water supply, overcrowded, substandard housing and dietary deficiencies, and the lack of opportunity to learn or practice rudimentary personal hygiene and community health protection have contributed to their poor health and high death rate.

Preventable diseases generally under control in the rest of the population still account for most of their illnesses and about a sixth of the deaths. Their mortality from these diseases—gastroenteritis, tuberculosis, respiratory infections (especially among babies), and the like—is from two to six times greater than for the rest of the Nation. In spite of an improving picture, the infant death rate remains high—almost twice that of other Americans. This is the major factor in the early average age at time of death—41 compared with 62 for the general population.

MEDICAL FACILITIES

Medical facilities are located as close as practicable to the widely scattered communities. In 1961, the Division of Indian Health had in operation 52 hospitals, 22 health centers, 18 school health centers, and several hundred field stations.

Where the Division does not have facilities, it provides medical and dental care through contract arrangements. Contracts were in effect in 1961 with 183 hospitals, 115 dentists, 281 physicians and clinics including local and State health and welfare departments, and 22 other specialists. In addition, to provide public health services where the Division has no facilities, 18 contracts were in effect between the

Division and state health departments and county boards of supervisors in 14 States including Alaska.

An additional means of providing hospitalization under contract is by participating financially in the construction of community hospitals serving both Indians and the general population, under Public Law 85-151. Since the law was enacted in 1957, PHS has participated in 13 community hospital projects for a total of 100 beds for Indians and Alaska Natives. Eight projects have been completed in five States; four projects in four States are under construction; and one project will be started as soon as the contract is awarded.

Because of the leadership of tribal governing groups and the educational efforts of the Public Health Service, greater use is being made of available medical care facilities. Since 1956, admissions to PHS Indian hospitals and contract hospitals have increased 30 percent. In 1961 there were nearly 76,000 admissions. Some 11,000 Indian babies were born in PHS and contract hospitals. Outpatient visits to the Indian hospitals and their related clinics rose to 686,000 in 1961—an increase of nearly 27,000 visits over 1960. Visits to PHS health centers and to school health centers totaled 250,000 in 1961. This was a 60-percent increase in 5 years.

The village clinic program in Alaska completed its first full year of operation in 1961. Physicians, accompanied by public health nurses or other health workers, conducted regular 1-to-3-day clinics in 25 villages and visited 78 other villages en route. Altogether, 194 village clinics were held with 15,696 outpatient visits reported. Some isolated areas utterly lacking in any preventive health services or treatment for acute medical problems were reached for the first time.

HEALTH EDUCATION

Health education activities of the Division are designed to meet the unique needs of the Indian health program. By 1961 there were 33 members of the health education staff, most of them Indians with college training in education, anthropology, or sociology. Their goal is to create within the Indian people an understanding of the fundamentals of good health and a desire to assume responsibility for improving their own health. Staff members of the health education branch serve as educational consultants to the other branches in the Division. Educational techniques, including use of audiovisual aids, are adapted to the specific goal.

THERAPEUTIC SERVICES

There was a 7 percent increase in the size of the nursing staff, which reached a total of 1,669. Public health nursing caseloads continued to increase. Plans were made for the advanced training

of Indian practical nurses to qualify them to provide additional assistance to the public health nurses.

Pharmacy services continued to improve. Pharmacists were assigned to four additional hospitals so that 84 percent of the patients and 76 percent of those who came for outpatient care were served by hospitals with pharmacies. The number of prescriptions dispensed increased by 39 percent.

Social workers of the Division devoted their major efforts to problems of children, the aged, the handicapped, the chronically ill. They participated in community planning for care and rehabilitation of the infirm aged. A continuing task is to interpret the changing social needs of the Indians and Alaska Natives to communities and public and private social agencies which share in the responsibility of providing to them the health and welfare services available to other citizens.

Growing recognition of the role of nutrition in the promotion of health and prevention of certain diseases resulted in increased emphasis on nutrition education in clinics and in community education programs for adults. Since it takes a long time to change dietary patterns, these efforts were directed toward utilizing the known cultural food practices and available food resources of the group concerned. In some locations, education was provided for Indians in the use of commodity foods supplied by the Department of Agriculture. Cooperative planning was carried on with the Alaska area office of the Bureau of Indian Affairs for improvement of lunches served in Alaska Native day schools. Plans were made to conduct studies in 1962 to obtain information about the level of nutritional health of the Indians.

The Medical Records Branch successfully undertook active recruitment for additional staff and held its first seminar for medical librarians. The seminar stimulated workshops and on-the-job training in the field.

IMPROVED HEALTH OF CHILDREN

The rate of infant deaths is declining. In 1959, latest year for which figures are available, the mortality rate was 46.8, compared to 56.7 in 1958. Of all Indian deaths reported in 1959, 21 percent were infant deaths, compared with 24 percent in 1958. Although the loss of babies aged 28 days through 11 months is still about $3\frac{1}{2}$ times that for all babies in the general population (excluding Alaska), the decline in infant mortality rate between 1958 and 1959 was about 23 percent. Among Alaska Natives, infant death rates are almost twice the death rates of Indian babies in the continental United States. In an effort to save more babies from illness and death, various studies

on causes of infant morbidity and mortality and means of preventing them were begun in 1961, and ten additional physicians and nurses on the maternal and child health staff were assigned to health facilities.

In the school health program, the Division continued to maintain close relations with the Bureau of Indian Affairs, especially in the treatment of mental and emotional problems of children and youth. A joint mental health demonstration project at the Flandreau Indian Vocational High School in South Dakota (in which the National Institute of Mental Health also participates) was continued, and there was evidence that its influence was reaching into the home communities of the students. Indian communities and other Indian schools requested assistance with mental health problems.

A school health study made in the Oklahoma City area was completed, and implementation of the study was begun in July 1961. A major health problem among school children is otitis media. Also needing emphasis are preventive services in the field of mental health and early diagnosis of tuberculosis.

TUBERCULOSIS CONTROL

Tuberculosis morbidity and mortality rates continued their downward trend. The rate of new cases reported among Indians has declined 48 percent in the 6 years since 1955, while the decline among Alaska Natives was about 76 percent in the same period. The death rates in 1959 were 31.1 per 100,000 Indians and 55.4 per 100,000 Alaska Natives—a reduction of 37 percent and 65 percent, respectively, since 1955. Despite improvement, the rate of death (excluding Alaska) was still $4\frac{1}{2}$ times higher than found in the general population.

Accidents have replaced tuberculosis as the leading cause of death among Indians, with a rate from three to $3\frac{1}{2}$ times greater than for the rest of the Nation. Tuberculosis now ranks seventh as a cause of death.

In 1961 the daily hospital census of tuberculosis patients was 720, which accounted for approximately 24 percent of the total daily census. In 1955 the number of tuberculosis patients in the hospitals was about 58 percent of the total. The decrease has been due to many factors: shorter length of hospital stays, outpatient treatment of tuberculosis, the chemotherapy program, and the drop in new cases of the disease.

DENTAL HEALTH

The goal of the dental program is to bring the Indians and Alaska Natives to a maintenance level of dental care. Visits to dentists in

1961 numbered 170,045, an increase of nearly 7 percent over 1960. Major emphasis was placed on services to preschool and school children, with close attention to preventive measures. Emergency treatment was given patients of all ages. Topical fluoride treatments were given to 15,861 children, an increase of 32 percent over the previous year. Dental health education was strongly stressed. The unmet needs in dentistry are vast: with available resources the Division was able to meet only half the dental requirements of the 22.1 percent of the beneficiary population examined in 1961.

In an attempt to increase the amount of dental services given, the Intermountain School in Brigham City, Utah, began evaluation of a new type of dental equipment. A training program in efficient clinic management was started for dental officers and their assistants. Eighteen young Indian and Alaska native women were trained as dental assistants for assignment in the program.

ENVIRONMENTAL SANITATION

Better environmental sanitation is basic to improved health among the people served. Their water supplies are often polluted and usually inadequate for domestic use, and frequently must be hauled for great distances. Waste disposal is often primitive. Public Law 86-121, passed by Congress in 1959, authorized PHS to aid Indians and Alaska natives in building domestic and community sanitation facilities. In 1961 the appropriation of some \$21½ million made possible the construction of 58 water supply and waste disposal projects to benefit about 5,000 families. These sanitation facilities are located on 34 reservations in 15 States and on nonreservation areas in Alaska and Oklahoma. The Indian people participated in the projects through contributions of funds, labor, equipment, and material totaling more than \$1½ million, and they will operate and maintain the facilities when finished. Seven engineering investigations were started on future projects.

Environmental sanitation personnel have a prominent role in preventive health education. Through their efforts, families and groups were motivated to improve or install 1,919 drinking water sources, 913 water storage facilities, and 2,799 waste disposal facilities. Tribal governing bodies have shown increased interest in adopting sanitary codes for Indian reservations.

The Division continued support of special studies at the PHS Arctic Health Research Center in Anchorage, Alaska, on practicable facilities for water supply and waste disposal in native villages, and on improving methods of curing fish and protecting food.

TRAINING FOR INDIANS AND ALASKA NATIVES

Formal courses and inservice training were provided for Indians and Alaska natives who are employed in the Indian health program. Some 83 young women were trained as practical nurses in the schools conducted by the PHS at Albuquerque, N. Mex., and Mount Edgecumbe, Alaska, during 1961. The Mount Edgecumbe program ended in the spring of 1961 because similar training was to become available in the fall through the Anchorage public school system. Courses for sanitarian aides, dental assistants, and community health workers were given at various locations. More than half the employees of the Division are of Indian heritage.

CONSTRUCTION

New Indian hospitals were opened in Sells, Ariz., on January 17, 1961, and in Gallup, N. Mex., on March 24, 1961. The Sells hospital, a general medical and surgical hospital of 50 beds, replaces a hospital destroyed by fire in 1947. The Gallup hospital is a 200-bed regional referral and medical center.

A new 50-bed hospital in Kotzebue, Alaska, and a hospital of 38 beds in Keams Canyon, Ariz., were nearing completion at the end of the fiscal year. Also under way were five health clinics in Ponemah, Minn.; in Pryor, Mont.; and in La Plant, Wapala, and Norris, S. Dak.

Major modernizations of four hospitals were completed at Rosebud and Pine Ridge, S. Dak.; Browning, Mont.; and Whiteriver, Ariz.

Contracts were awarded for a new 36-bed hospital at San Carlos, Ariz., and for new extensions to the Indian hospitals in Cass Lake, Minn., and Fort Defiance, Ariz.

On the drawing board were plans for a new 12-bed field hospital, storage and living quarters in Barrow, Alaska; a new 25-bed wing for the Red Lake, Minn., hospital; and a new outpatient wing and alterations at the hospital in Bethel, Alaska.

New housing for health personnel of the Division included completion of 47 units in connection with the Gallup and Sells hospitals, procurement of 14 mobile trailer quarters units for nine locations, and progress in construction of 118 other housing units at various locations.

Medical Services for Federal Agencies

The medical services of the U.S. Coast Guard and the Federal Bureau of Prisons are legal responsibilities of the Public Health Service and are operated by Bureau of Medical Services personnel assigned to these agencies. The medical programs of the Bureau of Employees' Compensation of the Department of Labor and the Maritime Admin-

istration of the Department of Commerce are conducted by personnel detailed to these agencies.

UNITED STATES COAST GUARD, TREASURY DEPARTMENT

Physicians were assigned to Coast Guard vessels on ocean weather duty in the Atlantic and Pacific; medical and dental officers were assigned to the Bering Sea Patrol and to icebreakers engaged in special operations in the Arctic and Antarctic; and various professional officers were on duty at U.S. shore stations. In all, 101 PHS officers served the Coast Guard—33 physicians, 52 dentists, 12 nurses, a pharmacist, a dietitian, a scientist, and a sanitary engineer.

At sea, medical officers often were called on to diagnose and prescribe treatment by radio for illnesses aboard merchant ships and fishing boats that had no physicians. Sometimes it was necessary to rendezvous at sea and bring the patient to the Coast Guard ship by small boat.

An emergency of this kind arose in the North Atlantic during stormy weather in March 1961. A seaman aboard the Norwegian vessel *APPIAN* sustained severe burns covering 35 percent of his body. In spite of rough weather and seasickness, he was brought aboard the cutter *OWASCO* and given medical treatment, then was taken to the naval hospital in Argentia, Newfoundland. The man was considered in remarkably good condition when he reached the hospital. The medical officer was credited with saving his life.

BUREAU OF PRISONS, DEPARTMENT OF JUSTICE

The Public Health Service provided medical, psychological, dental, nursing, and related health services for 24,000 prisoners in the Federal institutions. The Medical Service operated 22 hospitals and 8 infirmaries in the institutions. Fifteen of the hospitals are fully accredited by the Joint Commission on Accreditation of Hospitals.

The 275 full-time PHS staff members assigned to the health program were augmented by 250 consultants in various medical specialties. About 900 prisoners assigned to the medical services received training and assisted with hospital care.

The average daily population of the Federal prisons was 949 greater in 1961 than in the previous year. The hospitals provided a total of 416,149 hospital relief days in 1961. Medical staffs performed 865 major operations and 5,594 minor operations and gave 30,387 physical examinations. Outpatient departments gave 957,730 treatments. The two institutions for women reported 24 births. Deaths in all institutions totaled 49.

Increasing demands for psychiatric diagnostic and treatment services, which are required under the provisions of the Youth Corrections Act, the New Sentencing Act, and the act providing for the care and

custody of insane persons charged with or convicted of offenses against the United States, were met by assigning additional psychiatrists and psychologists to operating programs, and by appointing additional consultants in these specialities. By giving special training to other staff members, these specialists are making important contributions to the treatment programs.

Planning for a new 600-bed psychiatric facility for mentally ill Federal offenders was continued. A new dispensary building was opened at the prison camp in Safford, Ariz. The dispensary at the prison camp in Florence, Ariz., was modernized and redecorated. Modernization of the operating room at the Federal Correctional Institution, Terminal Island, Calif., was completed. A new anesthesia machine and two electrosurgical units were obtained for the Medical Center for Federal Prisoners in Springfield, Mo.

Program Highlights

Clinical psychiatry.—At the Medical Center and at several other institutions, the medical staffs continued their efforts to extend diagnostic and treatment services to prisoners with mental illnesses. The staffs at the reformatory for women in Alderson, W. Va.; the correctional institution on Terminal Island, and the reformatory in Chillicothe, Ohio, were augmented by the addition of psychiatric consultants. At the prison camp in Tucson, Ariz., which houses youthful offenders, the psychiatric consultant continued to develop a mental hygiene program. At all these institutions, the psychiatrists continued to use the newer psychopharmacologic agents as well as group and milieu therapy.

Clinical psychology.—A training program for psychologists who are interested in the correctional field was begun at Chillicothe under auspices of the Bureau of Prisons, the Veterans Administration, and Ohio State University. The addition of a consultant psychologist to the Alderson staff made it possible to start a program of treating prisoners and training personnel. The psychologists at several institutions played a leading role in efforts to train personnel in understanding and handling behavior problems.

Group work.—A number of staffs made continued use of group techniques both in treatment and training. At the correctional institution in La Tuna, Tex., a group treatment program was implemented for certain narcotic addicts. At Lompoc, Calif., the group approach was used with addicts and homosexuals. The Medical Center continued to use a team approach with meetings of ward personnel to consider most effective ways of handling patient problems.

Medical, dental, and technical services.—Several units including the correctional institution in Tallahassee, Fla., endeavored to increase

the effectiveness of their outpatient departments in the face of personnel and space shortages. Medical staffs continued to make special efforts to help prisoners with such problems as obesity, hypertension, diabetes, tuberculosis, and acne and other disfiguring conditions. At the Detention Headquarters in New York, the program for denarcoticization of addicts continued to operate successfully. Dental services at all institutions were continued at a high level. The central dental laboratory at the Medical Center in Springfield completed 2,617 dental prosthetic appliances.

Many of the medical staffs have developed training programs to give prisoners skills in the medical technical fields, which will facilitate their future adjustment in the community. For example, a prisoner trained at the correctional institution in Seagoville, Texas, successfully qualified for registration as a radiologic technologist. Upon release he was employed as chief laboratory and X-ray technician in a large State hospital.

Research.—Medical staffs of six institutions helped to select prisoner volunteers for participation in a cold virus study which is being conducted at the Clinical Center, National Institutes of Health. The Alderson staff took part in an evaluation of a vaccine against infant diarrhea. The staff of the penitentiary on McNeil Island, Wash., assisted in a study of muscle tone, the findings of which will be applicable in space travel. Malaria studies were continued at Atlanta. At Leavenworth the staff continued a follow-up study of narcotic addicts. At the correctional institution in Milan, Mich., the staff participated in a study to devise an improved test for glucose tolerance.

Participation in community affairs.—Several staffs cooperated with state tuberculosis case-finding programs. Many formed excellent cooperative relationships with other nearby government activities. The medical department of the camp in Tucson gave assistance to persons injured in highway accidents. Prisoners donated 14,765 pints of blood to the American Red Cross and local blood banks during the year.

BUREAU OF EMPLOYEES' COMPENSATION, DEPARTMENT OF LABOR

A Government employee was severely injured by electrical burns in May 1960 when a crane came in contact with a high-tension wire while he was helping to unload a 20-ton transformer. He lost his legs and his right arm. His left arm was disabled.

Through closely coordinated physical and vocational rehabilitation services brought to the aid of the injured worker by the Bureau of Employees' Compensation and cooperating agencies, he learned to walk again with artificial legs, to write, and to do other things, and he was trained for a new job as a radio dispatcher.

The case illustrates the increasing emphasis the Bureau of Employees' Compensation gave in 1961 to the rehabilitation of Federal employees who were injured or became ill in line of duty.

Medical officers of the Public Health Service assigned to the Bureau are responsible for the medical program under the Federal Employees' Compensation Act and related acts. About half of this work is carried on in Washington headquarters, the rest in district offices in New York, Boston, Chicago, and San Francisco.

Increased utilization was made of Federal medical establishments, notably those of the U.S. Air Force. Outpatient and hospital facilities of the Public Health Service provided direct medical care and assistance in evaluation of patients' work capabilities. In physical and vocational rehabilitation, the services of many facilities throughout the United States were used. Particular attention was given to rehabilitation of employees disabled because of a mental or psychoneurotic condition.

MARITIME ADMINISTRATION, DEPARTMENT OF COMMERCE

The physician and two dental officers on duty at the U.S. Merchant Marine Academy, Kings Point, N.Y., provided health care for the 700 cadet midshipmen and 216 staff members, and the medical officer in charge of the Public Health Service hospital on Staten Island acted as professional consultant for the academy's health program.

There were 570 admissions to the academy's Patten Hospital. Outpatient medical treatments and services numbered 2,660; dental visits, 4,060. The North Shore Hospital, a community hospital in Manhasset, N.Y., provided emergency medical care for cadets when necessary.

In Washington, the Service physician detailed as Chief Medical Officer of the Maritime Administration revised the standardized list of medical supplies and equipment for sickbays and emergency rooms of the Reserve Fleet; advised on overcoming an occupational hazard the Reserve Fleet encountered at Olympia, Wash., in the form of exposure to chlorine dioxide gas resulting from measures against incrustation on hulls of ships; advised on use of resuscitubes in first aid; and helped with preparation of clinical abstracts.

National Institutes of Health

The scope of the various programs of the National Institutes of Health continued to expand during fiscal year 1961. This growth took place principally in the extramural programs and was accompanied by necessary increases in NIH staff, and by reorganization and

expansion at top management levels. Expenditures on medical research (including research training) increased by more than a third, reaching a level over five times greater than it was only 5 years ago and representing 40 percent of the total national effort in medical research.

A proposal submitted to Congress by President Kennedy during this period would establish a new National Institute for Child Health and Human Development in which would be centered research into perinatal and childhood diseases, on the one hand, and the problems of aging on the other. An Institute of this kind would concentrate on such problems as congenital malformations, infant mortality, mental retardation, and maternal factors influencing child health and development. The process of aging, under this program, would be considered as a part of the dynamics of human development.

NIH physical expansion has been rapid. For the first time in its history, the Division of Biologics Standards is consolidated under one roof. Dedication of the new building for the National Institute of Dental Research occurred in May 1961, and considerable progress was achieved in the construction of the new surgical wing of the Clinical Center and in the new Administration Building, which will house the several Institute grants programs and the six Institute Directors and their immediate staffs.

In the construction planning stage are (1) a new building to house both the Mental Health and the Neurological Diseases and Blindness Institutes, (2) a new Cancer Institute building, (3) adequate housing facilities to provide for proper control, rigid caretaker practices, and testing procedures in the breeding of specific germ-free animals, (4) research and animal facilities at the newly acquired animal farm.

The long-existing problem of recruiting and retaining high-calibre staff for NIH laboratories was intensified during this period. In one respect, this was a measure of the success of the NIH grant system, for the facilities, research environment, and superior pay which were attracting NIH researchers and research administrators to other institutions often could be ascribed at least in part to NIH grants. Several proposals have been formulated which, if they can be effected, will make it possible to maintain a professional staff of the highest competence in spite of the competitive situation.

Criteria for grants and training awards are designed to assure high quality in results. The past year has seen a continuing emphasis on grant support to the basic medical sciences such as biology, genetics, biochemistry, biophysics, and pharmacology, all of which are crucial to medical progress.

Biomedical research expenditures, from all sources, would constitute about 5 percent of the Nation's total research and development

costs. The increased funds made available to NIH makes this agency responsible for 40 percent of the total medical research expenditure in the country.

The impact of NIH grants on medical schools, university departments, hospitals, and other biomedical research institutions has revealed a need for major program planning that anticipates and measures the cumulative effects on these institutions.

For most of the medical schools, university departments, hospitals, and other institutions whose research is supported by NIH grants, these funds now represent a substantial part of their entire income. Time and effort devoted to research at these institutions have greatly increased with increased involvement of faculty and staff. For this reason, planning must henceforth relate not only to the needs of the individual investigator, but also to the cumulative effect on his institution.

This new approach will not diminish the importance of the individual research project system. The new concern will be directed, however, to the overall needs of the institutions where the bulk of U.S. biomedical research is conducted. The new planning approach will seek fulfillment of the objectives of medical research without adversely affecting the grant-receiving institutions.

Several plans have been proposed for attaining this new objective. All are designed to increase local, non-Federal control over medical research. These plans include the following:

(1) Consolidation by universities of many of their smaller existing research projects into larger projects with coherent program objectives.

(2) Support of Clinical Research Centers. Such centers, for which special support was begun in 1960, are intended to stimulate growth of additional local resources for complex investigations involving many diseases and the broad spectrum of medical specialties.

(3) General Research Support. Such grants to schools of medicine, osteopathy, dentistry, and public health would be in proportion to contributions from the institution's non-Federal research funds, and would permit a degree of initiative not possible under project grants.

(4) Research Career Awards. These would provide support for highly qualified individuals who wish to pursue a research career under stable tenure conditions. Final mechanisms had not yet been worked out at the end of the period covered by this report.

An important advance in the NIH program of support for research in other countries was the establishment of five International Centers for Medical Research and Training, under the provisions of the International Health Research Act of 1960. These Centers will permit scientists from American universities to work overseas, while retain-

ing an integral relationship with their institutions. Under the program, an American university, in collaboration with a foreign institution, establishes a research and training facility in the foreign country, primarily to study health problems common to both the United States and that country. This arrangement provides an opportunity to study such problems under environmental, ethnic and medical conditions not found in the United States, and also provides a basis for improved international relationships in the health sciences.

During this period, Centers have been established by five American universities and their cooperating overseas institutions: University of California, and the Institute for Medical Research, Kuala Lumpur, and University of Malaya, at Singapore; Tulane University and the Universidad del Valle, Cali, Colombia; Johns Hopkins University and the All-India Institute of Hygiene, Calcutta School of Tropical Medicine, Calcutta; the University of Maryland, and Field Unit, Rawalpindi, West Pakistan; and the Louisiana State University School of Medicine, and the University of Costa Rica School of Medicine.

Benefits of international medical activities derive not only from the obvious fact that problems of disease control are world-wide, but also because they make it possible to work effectively with the research talent, resources, and unique investigative settings in other countries. These benefits are being fostered through appropriate international organizations such as World Health Organization, Pan American Health Organization, World Federation of Mental Health, and World Federation of Neurology.

Recognizing the importance of such planning, NIH has established the Office of International Research as a staff office of the Office of the Director. This office is responsible for coordinating all international activities of the National Institutes of Health. The office advises the Director and Surgeon General on matters relating to the international aspects of medical research and research training, and assists the Institutes in the development of international programs. It is specifically responsible for the central administration of all NIH activities utilizing U.S.-owned foreign currencies, and constitutes the central point of research relationships with the World Health Organization, Pan American Health Organization and other international research and scientific organizations.

During this reporting period, the total obligations for NIH international activities exceeded \$13 million (exclusive of the Foreign Currency Program). There were about 500 international awards for research and training, accounting for approximately \$8 million of this. The global distribution of the awards is seen in the countries involved: Australia, Austria, Belgium, Brazil, Canada, Denmark, Eire, England, France, India, Italy, Japan, Mexico, Nigeria, Norway,

Scotland, Sweden, Switzerland, and West Germany. The remainder of the total figure included amounts awarded to American institutions for international centers for research and training, for U.S. Fellows studying abroad, for foreign Fellows studying in the United States, and for foreign visiting scientists brought to NIH.

The reports that follow on the seven Institutes, the four Divisions, and the Clinical Center provide a closer view of NIH performance during the past year.

Institute of Allergy and Infectious Diseases

Institute studies during the year added substantially to the understanding of a number of serious childhood illnesses. Results from a wide range of investigations included promising clinical tests of an antistaphylococcal drug and development of a new laboratory study model for a little understood allergic disorder. Respiratory syncytial virus (RS) was associated for the first time with infant pneumonia and other childhood respiratory diseases in a series of studies conducted at the Institute and Children's Hospital, D.C. These findings, together with the results of previous Institute studies and findings by other scientists, may explain as much as 60 percent of children's severe respiratory illnesses and suggest the need of vaccine development.

A cooperative epidemiologic investigation by Institute and Navy scientists associated Eaton agent with 68 percent of atypical pneumonia cases at Parris Island Marine Training Center. Their serologic findings, made during a 6-month period, constitute the most complete evidence presented in 20 years on the association of Eaton agent and atypical (non-bacterial) pneumonia.

In a related study, the same group reported successful treatment of Eaton agent pneumonia with a tetracycline drug, thus resolving a decade of controversy regarding the efficacy of such drugs against this type of pneumonia.

Institute clinical tests indicate that an antibiotic (still unnamed) developed by Hoffman-LaRoche Chemotherapy Laboratory is effective against certain systemic fungal infections. Several of these constitute extremely destructive diseases which hitherto have proved unresponsive to drug treatment.

A new synthetic penicillin, called Staphicillin, developed jointly by Bristol Laboratories and a British firm, was tested at the Institute and found effective against severe staphylococcal and streptococcal infections. Difficulty in treatment of the former is usually the result of the emergence of resistant forms of bacteria.

In the area of diagnosis, Institute scientists described a test which may make it possible for a single laboratory worker to screen many

more suspects for malaria in a single day than hitherto possible. The new test, based on the fluorescent antibody technique, represents the first recorded instance in which a malaria parasite infecting humans has been viewed by this method.

Resistance of human malaria to chloroquine has been definitely demonstrated for the first time by an Institute scientist and an investigator from the University of Texas. Chloroquine has been an important adjunct to insecticides in global malaria eradication programs since World War II.

Allergic thyroiditis has been produced experimentally in a strain of inbred guinea pigs for the first time by Institute scientists. The successful experiment provides a model for study of this form of human thyroid disease which apparently is an autoimmune disorder.

GRANT-SUPPORTED RESEARCH

Studies leading to the first vaccine of demonstrated effectiveness against measles were supported in part by Institute grant funds. The vaccine, still in the experimental stage, probably will be submitted for Federal licensing in the near future. Studies have shown the vaccine to be easily administered and to cause only mild systemic reaction. A preparation conferring immunity comparable to natural measles is desirable, because of the disease's significant mortality, frequency of bacterial complications, occasional involvement of the central nervous system, widespread morbidity of the uncomplicated disease, heightened virulence of outbreaks in isolated populations, and unfavorable effects on certain other pre-existing illnesses.

Grantees at the University of Utah have developed a practical method of quantitative urine culture—utilizing equipment commonly employed in dairy bacteriology—that helps diagnose urinary tract infection more quickly and less expensively than do classical methods. Early detection is essential for effective treatment of urinary tract infections.

Institute of Arthritis and Metabolic Diseases

ARTHRITIS RESEARCH

Studies by Institute scientists and grantees on the possibility of an immunologic basis for rheumatoid arthritis have pointed to a relationship, in some way, of a number of rheumatic diseases to a hypersensitivity ("allergy") to certain compounds in the body of patients, possibly to some of their own altered proteins.

This concept of hypersensitivity derives from the discovery, several years ago, of the so-called rheumatoid factor(s) in the blood of many

arthritics and their relatives. These factors, whose presence in the blood helps confirm the diagnosis of rheumatoid arthritis, have many antibody characteristics, suggesting that immunologic reactions are involved in their formation.

Institute grantees at the Hospital for Special Surgery in New York have reported finding in the blood of these patients still another substance, which they have named the "inhibitor of complement fixation," or ICF. Different from the rheumatoid factor, this substance inhibits processes that normally aid the removal of potentially deleterious items from the body. ICF together with the rheumatoid factor may comprise a unique immunologic system characteristic of arthritis and closely related diseases.

Follow-up medical and serological examination studies of former Clinical Center patients who have returned to their homes after treatment at the Institute have been made possible by a specially equipped mobile clinic operated by the Institute across most of the country. The rolling laboratory is making possible a careful study of the familial incidence of Sjögren's syndrome, a disorder related to rheumatoid arthritis.

A collaborative study by NIAID and NCI scientists has provided the first definite experimental proof that osteoarthritis, a common joint disorder affecting older people, may be under hereditary control. The study used 1,700 mice and showed that a single gene may have accounted for much of the arthritis in these animals, although other genes and environmental factors also contributed to the condition.

Clinical trials at the Institute have demonstrated the usefulness of two new drugs—sulfipyrazone and zoxazolamine—in problem cases of gout which do not respond to older drugs. The new drugs remove the excess uric acid characteristic of gout. Institute scientists have also found that low doses of aspirin may interfere with the laboratory diagnosis of gout, since aspirin causes an increase in uric-acid blood levels.

DIABETES AND OTHER METABOLIC DISEASES

The new oral drugs continue to demonstrate their value in the treatment of diabetes. It now appears much less likely than once feared that these drugs will damage the pancreas. Their value has been enhanced by the work of Institute grantees at Harvard Medical School, Boston, and the Southwestern Medical School, Dallas, demonstrating that combinations of the oral drugs can benefit some who are not helped by a single drug alone. This combination therapy has permitted an estimated 35 to 40 percent of all known diabetics to substitute the oral drugs for hypodermic syringes.

To determine how the drugs will affect the complications of diabetes that appear only after many years, Institute scientists are collaborating with a group of medical centers throughout the country in a long-term study to compare the effects on such complications of different forms of diabetes therapy, including insulin, diet, the oral drugs, and various combinations of these.

New findings were reported on the unusually high resistance to insulin of some patients, who, consequently, require many times the normal amount of insulin. In the blood of some of such diabetics, Institute studies have shown insulin antagonists even before they receive insulin injections. This supports the long-held view that insulin resistance, or interference with effective insulin concentration to peripheral tissues, rather than the body's inability to produce insulin, may be a factor in many cases of diabetes.

In several other serious yet less-known metabolic diseases, Institute-supported investigators reported encouraging advances. For Wilson's disease, a grave disorder with abnormal accumulations of copper in the body, grantees have developed a basic regimen (copper-poor diet and administration of a metal-binding agent) that has brought definite improvement and may prevent the disease. For phenylketonuria, an inborn error of metabolism whose most disastrous consequence is severe mental retardation, a special low phenylalanine diet has been developed, which, if started soon after birth, appears to prevent the characteristic mental damage.

BASIC RESEARCH

Two research findings made this year may lead to a better understanding of the basic functioning of hormones and enzymes. Grantees at the University of Pittsburgh, culminating 17 years of research, have achieved the first successful laboratory synthesis of pituitary ACTH (adrenocorticotropic hormone). The synthesis may clarify the functions of the pituitary gland and lead to new laboratory techniques for producing other important hormones—those “chemical messengers” whose influence is well-known, but not their mode of operation. Institute scientists have recently discovered that certain adrenal hormones can directly affect the action of a key enzyme within many cells by splitting its molecules into four parts. This is the first time a hormone has been found to influence an enzyme's vital chemical activities by a direct effect on its physical structure.

Other developments in basic research include the finding by the Institute's Program on Geographic Medicine and Genetics that inherited serum proteins called haptoglobins may be linked with various diseases. Studies have been planned in an attempt to iso-

late the different haptoglobin types and to confirm previous findings that haptoglobin concentration rises in different diseases.

Cancer Institute

Mounting emphasis was placed on research in the relationship between viruses and human cancer. A critical stumbling block was the acutely limited supply of research materials and equipment for virus-cancer investigators. To remedy these deficiencies, The Institute has awarded a number of grants and contracts to nongovernmental institutions for development of (1) pure virus strains and their diagnostic agents; (2) laboratory animals whose normal complement of viruses has been characterized; (3) certified lines of mammalian cells for use in tissue-culture studies of viruses suspected of causing cancer; and (4) laboratory equipment, such as a small-scale liquid nitrogen refrigerator for handling viral materials.

The Cancer Chemotherapy National Service Center is concerned with discovery, development, and clinical application of effective, perhaps curative, anticancer drugs. Program adjustments resulted in a slight reduction in the number of new materials accepted for evaluation and a corresponding increase in the volume of research on agents already proved active by laboratory tests. The number of drugs evaluated against human cancer under the chemotherapy program rose within the year from about 110 to more than 160, and the total number of participating patients reached 18,500.

INSTITUTE RESEARCH

Most dramatic, perhaps, was the achievement of 5-year survivals with no evidence of disease in a small number of patients with uterine choriocarcinoma, a rare and highly fatal tumor that develops during pregnancy. Sixty-three patients have been treated with the anti-cancer drug, methotrexate, widely employed in the management of acute leukemia. Fourteen of the women also received a newer drug, vinblastine, administered when methotrexate-resistance developed. In 30 patients, all trace of the disease disappeared, including metastatic lesions in the lungs and brain. A few of the women have now remained in apparent perfect health for 5 years or longer, the first report of such survivals produced by chemotherapy alone.

Beneficial results were reported from the use of a new agent—o,p'-DDD—in patients with advanced adrenal cancer. The drug is of special interest because it seemingly is specific for adrenal cortex tissue and for malignancies that arise there. In 7 of 18 treated patients, tumor metastases were measurably reduced, and in 7 others

lowered amounts of hormone excretion indicated an antitumor effect. These results could be attributed entirely to the action of the drug, since spontaneous remission is unknown in adrenal cancer.

Collaborating scientists of the Institute and the Division of Biologics Standards described a method for obtaining relatively large quantities of platelet-rich plasma from a single blood donor. Platelets are essential for blood clotting and therefore often urgently needed to control hemorrhage, one of the chief causes of death in leukemia patients. The new technique permits separation of plasma from the red blood cells, which are then immediately returned to the donor. In this way a single donor may contribute all the plasma needed by one leukemia patient. Furthermore, by reducing the number of donors, the risk of communicating infectious hepatitis is lowered.

An Institute scientist reported the results of further studies of a virus that induces leukemia in several strains of laboratory mice. The virus may be passed from one generation to the next through the placenta, an observation that may shed some light on the possible transmission of other leukemia viruses, theoretically including a human leukemia virus.

Staff scientists working with investigators at the National Naval Medical Center adapted human epidermal cells to growth in a medium free of blood serum. Since serum may contain substances that inhibit the growth of viruses, the new medium may prove valuable in tissue-culture studies designed to detect or grow viruses suspected of causing human cancer.

The Cancer Chemotherapy National Service Center reported new findings on survival rates of cancer patients by sex. Among patients treated surgically for localized lung cancer, women have a 5-year survival rate double that of men. Differences in favor of women were also reported for cancer of the thyroid gland, tongue, and salivary gland, for skin melanoma and for Hodgkin's Disease. The precise reasons for the superior performance of women are not known.

GRANT-SUPPORTED RESEARCH

Scientists working under an Institute grant reported results of a study of combination surgery and chemotherapy in the treatment of breast cancer, the leading cause of death from malignant disease in women. One hundred and seven patients were selected for radical mastectomy. Of these, 57 also received thio-TEPA on the day of operation and on the 2 following days. The remainder received no drug treatment. While half of the latter group showed tumor recurrence within 2 years, about 80 percent of the drug-treated patients remained free of recurrent disease during the same period. These results suggested a possible method of treatment for breast cancer

that may afford better control of this disease than is now ordinarily possible.

An Institute grantee observed that 54 percent of rats surviving an acute hemolytic anemia acquired immunity to six different transplantable tumors. In others that did not completely resist tumor transplants, the neoplasm was found to be slow-growing and encapsulated. Further efforts are in progress to determine the nature of the immunization process, since research of this kind may lead eventually to the discovery of similar phenomena in man.

Testosterone, a male sex hormone, has been used for many years for the temporary control of certain types of advanced breast cancer. This agent, however, produces undesirable masculinizing effects. In grant-supported clinical trials of a related compound, scientists found that delta-one-testololactone was about as effective as the older agent but entirely devoid of virilizing properties. Studies of this and other related agents are continuing under auspices of the Chemotherapy Center.

Grantees using a specially designed chamber to study the effects of cigarette smoke on bits of lung tissue reported the observation of a three-phase response. First, there was an immediate increase in the flow of mucus that normally covers this tissue. Next, they observed a sharp decrease of about 16 minutes' duration. Finally, a 30-minute recovery period was seen. These findings led to speculation that lung cancer may result from the physical irritation caused by smoke products as well as other environmental irritants, and not specifically from cancer-producing chemicals in the smoke.

Institute of Dental Research

Dental research expanded in such areas as calcification, growth of development of teeth and their supporting structures, experimental dental caries, enzymatic changes in oral connective tissue, and epidemiology of oral diseases as related particularly to nutrition and genetic factors.

In explaining the wide variations in the pattern of experimental tooth decay in rodents, many investigators have traditionally classified animals into resistant and susceptible strains. Recent studies by Institute scientists have shown that experimental dental decay is primarily a bacterial disease, and that many of the differences in type of decay previously attributed to hereditary factors, now may be related to the presence of specific microorganisms which can be transmitted from animal to animal. The pathogenicity of these microorganisms, however, depends upon the type of diet available and the animal's heredity.

With information available on the origin of dental decay in certain animals, investigators undertook a systematic search for chemical agents that inhibit specific microorganisms. Three clinical compounds, already tested, have noticeably reduced animal caries by altering the normal growth process of various oral bacteria. In other biochemical studies dental decay in animals has been substantially reduced by adding certain mineral phosphates to the diet. Although the precise action of the phosphate compounds is still obscure, it is believed that some local inhibitory reaction may occur on the exposed surfaces of the teeth.

Better understanding of the causal role of prenatal factors in various oral diseases was achieved during the year. In one investigation, pregnant rats, rendered acidotic by exposure to relatively high concentrations of carbon dioxide during the earlier stages of pregnancy, delivered offspring that developed a marked degree of dental caries. On the other hand, acidosis induced during the last trimester of pregnancy did not alter the caries susceptibility of the mother's young. Other similar studies were directed toward a better understanding of the mechanism of cleft palate formation; causal relationships were established with maternal-fetal anoxia, and amniotic-sac compression.

GRANTS AND AWARDS

New research project grants were awarded in support of fundamental studies in the various clinical and basic sciences of primary importance to dentistry. For example, invertebrate organisms, used as material for the investigation of the calcification mechanism, are being studied by grantees at Duke University. These materials offer a variety of experimental approaches not afforded by mammalian calcification systems. Grantees at Harvard University have completed detailed histologic studies that identify the stages of progression of periodontal disease in the rice rat, and relate the high susceptibility of these animals to this disease to genetic factors.

Additional grants were awarded to non-Federal institutions to train clinical and basic science personnel for research work. Also, a new program was established to train under-graduate dental students to work with chairside assistants.

Heart Institute

Cardiovascular disease, the Nation's leading cause of death, now takes 900,000 lives a year. The National Heart Institute strengthened its programs for the conduct and support of research on this major disease problem.

Atherosclerosis, the form of hardening of the arteries that leads to heart attacks and strokes, is characterized by deposits of fatty materials in the vessel walls which progressively reduce the channels through which blood flows to vital organs. Much evidence has accumulated linking these artery-clogging lesions with high levels of fatty substances, particularly cholesterol, in the blood. The amount and kinds of fat in the diet can influence the blood cholesterol level and may retard or accelerate formation of these lesions. Their underlying causes, however, appear to lie somewhere in the complex process by which fats are transported, synthesized, stored, and broken down by the body—an area of major research emphasis in the Heart Institute.

One approach to the control of high blood-cholesterol levels has been based on the body's ready manufacture of cholesterol, and an intensive search has been underway in recent years for nontoxic drugs that interfere with this production. Study of one such compound by Heart Institute scientists has shown that it lowers blood-cholesterol levels by blocking the last step in the chemical sequence by which the body synthesizes cholesterol. It was found, however, that the fall in cholesterol in patients treated with the drug was accompanied by a rise in desmosterol (whose long-term biological effects are as yet unknown), the precursor of cholesterol, so that the total of sterols in the blood was not greatly changed. Another investigation seeks blockade of an earlier step in the synthesis of cholesterol—one far enough down so as not to interfere with other metabolic needs for the same intermediate compounds, but early enough to avoid sterol accumulations. Preliminary studies have shown that several compounds can block this step, but their effects have not yet been evaluated.

Significant knowledge was gained from other studies of fat transport and metabolism. Findings of one study indicated that the interplay of the rates of deposit and removal of cholesterol from the artery wall may be a major factor in development of atherosclerosis. Another study showed that the liver is the source of the protein as well as the lipid fraction of lipoprotein molecules, the form in which fats are transported in the blood.

In the field of hypertension, because many drugs which alter the metabolism of amines also effectively lower blood pressure, much research was directed at obtaining more complete knowledge of the processes of amine metabolism. One promising family of compounds given clinical trials at the Heart Institute, known as decarboxylase inhibitors, inhibit the synthesis of several amines, including norepinephrine and serotonin. The compounds appear promising both as research tools in hypertension and as therapeutic drugs for treating the condition.

Another family of enzyme inhibitors studied were compounds that block the action of monoamine oxidase, an enzyme that plays an important role not only in hypertension but also in mental disorders. Several of these compounds were found to be powerful blood-pressure lowering agents but were too toxic for therapeutic use. A new compound with a markedly different chemical structure appeared, from limited clinical trials, effective in lowering blood pressure and, thus far, to be largely free of toxic effects.

Findings from epidemiological studies, such as those reported from 6 years of follow-up in the Heart Institute's Framingham (Mass.) study, are helping to describe the "coronary prone" individual. It was found that the risk of developing coronary heart disease for men 40 to 60 years of age is almost three times as great for those who have either a high blood-cholesterol level, high blood pressure, or an enlarged left ventricle as it is for those who are normal in these respects. Combinations of any two or all three of the abnormalities further increased the risk.

Excessive quantities of aldosterone, a hormone from the adrenal glands, are secreted in congestive heart failure and other diseases, contributing to the excessive water retention or edema that frequently accompanies them. Heart Institute studies have shown that aldosterone production and secretion are controlled by another hormone, a mysterious substance called the aldosterone-stimulating hormone. Strong evidence was also provided that the hormone is produced by the kidney.

The discovery was made in physiological studies that there are reflexes, originating in the carotid sinus—the dilated portion of the carotid artery in the neck—which control the force with which the receiving chambers of the heart pump blood into the ventricles, thus importantly affecting the heart's performance and output. Further studies showed that the carotid sinus also affects the circulation by constricting or dilating the veins and by modifying bloodflow through the kidneys.

Advances were made in developing and refining techniques and procedures for more precise diagnosis of congenital and acquired heart defects. Several procedures have now been shown by clinical studies to be highly reliable means for detecting, localizing, and estimating the size of abnormal openings in the partition separating the left and right sides of the heart. These include techniques utilizing radioactive krypton, ascorbic acid, and cold saline solution as indicators.

Among the year's productive efforts were those directed toward development of improved artificial heart valves and synthetic replacements for severely diseased artery segments and surgical procedures for installing them. One important aspect of these studies has been

the evaluation of synthetic materials, particularly those properties of a specific material which might either promote or inhibit the formation of blood clots. Institute studies showed that the relative tendency with respect to clot formation was determined more by the chemical nature of the surface of the material than by its wettability or electrical charge.

GRANT-SUPPORTED RESEARCH

A new method of closed-chest cardiac massage to restore blood flow in patients whose hearts have stopped beating was reported by scientists of Johns Hopkins University. The operator places both hands, one above the other, on the patient's breastbone and presses vertically downward once a second. The method is an important advance in emergency treatment since, unlike direct cardiac massage, it does not require surgical exposure of the heart and can be used anywhere the need arises.

Various aspects of the interrelationship of dietary factors and atherosclerosis were studied. Experiments with nibbling and meal-eating chickens at Michael Reese Hospital and Medical Center, Chicago, led to the conclusion that consuming food at periodic mealtimes may play a significant role in atherosclerosis. Chickens fed regular meals had much higher cholesterol levels and developed much more severe coronary atherosclerosis than chickens allowed free access to the same kind of food, even though the meal-eaters consumed less.

Findings reported by scientists of the Veterans' Administration Center, Martinsburg, W. Va., and George Washington University suggest that arachidonic acid—a highly unsaturated fatty acid found in certain fish oils, dairy products, and fowl—may be a significant factor in the relative immunity to atherosclerosis enjoyed by animals of certain species. Cholesterol fractions of serum from eight species were analyzed and compared. The arachidonic acid content was found to be highest in those species most resistant to atherosclerosis and lowest in the most susceptible species.

A technique using a cardiac catheter to inject the clot-dissolving enzyme fibrinolysin into the coronary arteries of heart-attack patients was reported by investigators at the University of Miami. The procedure, which was well-tolerated by the patients, assures high concentrations of enzyme at the site of the obstructing blood clot. It also allows intermittent injections which appear to be more effective in dissolving clots than is continuous flow.

Encouraging progress was made toward overcoming the problem of rejection of foreign tissues by the body. The first successful kidney transplant between nonidentical twins was reported by scientists of Peter Bent Brigham Hospital and Harvard Medical School in Boston.

Irradiation of the whole body was used to modify the recipient's immune response which would otherwise have caused rejection of the grafted kidney.

Institute of Mental Health

All aspects of mental-health activity—from basic and clinical research and training to the application of research findings in behalf of prevention, patient care, and rehabilitation—were covered by the Institute program. Special emphasis was placed on demonstration projects employing new and improved therapies, including an ever-expanding list of psychopharmacological agents. These, plus new techniques both in and out of the mental hospital, and the development of new mental-health programs and treatment facilities, are gradually reducing the number who must be institutionalized in public mental hospitals. This steady advance in treatment and control of mental illness was reflected in the decline, for the fifth consecutive year, of the resident mental hospital population.

GRANT-SUPPORTED RESEARCH

The complexities of mental-health research demand a diversified approach. Thus, the more than 1,200 grants that were made to qualified researchers during this period spanned the medical, biological, psychological, and social sciences. Seeking clues to the etiology, prevention, and treatment of mental illness, these researchers examined the body's chemistry as well as the quality of a mother-child relationship; the mechanisms of the brain as well as the social structure of the community; the effects of psychoactive drugs as well as those of the hospital environment and the patient-physician relationship.

More than a third of the research-grant program was concerned with schizophrenia, a major medical and social problem accounting for more than half of all patients hospitalized for mental disorders in the United States. Strong emphasis in recent years has centered on possible biochemical origins of mental disease, particularly schizophrenia, and significant findings have pointed to a factor in schizophrenia that alters the carbohydrate metabolism of red cells. During the past year, by applying pertinent tests to schizophrenic patients and normal volunteers, it was found possible to predict accurately in a highly significant number of cases the presence or absence of schizophrenia.

Approximately one-fourth of grant funds went for studies with children—problems of normal growth and development as well as those of mental retardation, schizophrenia, juvenile delinquency. A large number of grants covered various aspects of aging—normal and

pathologic—including those assets of aging which might be more fully employed in attaining and holding on to mental health.

A major event in the research-grant program was the initiation of two new types of grants—program project and center grants—for the support of broad-based, long-term research activities.

Grants from the Psychopharmacology Research Center made it possible to accelerate studies of drugs used in mental illness. In February 1961, a 2-year collaborative study of phenothiazine treatment of acute schizophrenic psychoses was launched. Additional developments included a program of special grants for early clinical investigation of psychiatric drugs and an abstracting service, *Psychopharmacology Abstracts*.

BASIC AND CLINICAL RESEARCH

Research conducted in the Institute's own laboratories included basic metabolic studies, investigation of brain areas that control important aspects of behavior, and fundamental studies of body chemistry, utilizing psychopharmacological substances as research tools.

The intramural program also included a wide variety of studies on child development, patterns of family living, and social interaction.

Major research was done on the metabolism of the biogenic amines—neurological substances which appear important in brain activity and transmission of nerve impulses. Increased knowledge of the synthesis, degradation, and distribution of these basic elements prepares the way for comparative studies that may expose to light the hidden sources of mental illness.

NIMH scientists investigating the response of free fatty acids to insulin found a reproducible alteration from the norm in a significant number of schizophrenic patients. This investigation is intended to determine to what extent either of these characteristics is basic to a subgroup of schizophrenia.

Another investigation underway involves study of the intermediate metabolism of tryptophane. A related study has shown the existence of enzyme systems capable of giving rise to another psychotomimetic agent (dimethyltryptamine), thus raising the possibility that this substance may occur in man, and that variations in its metabolism may be related to certain mental disorders.

New biochemical methods were developed to assess emotional aspects of behavior. A series of psychoendocrinological studies was conducted with normal volunteers to trace the relation between endocrine function, normal variation in emotional states, and a variety of psychological stresses, both induced and spontaneous. The findings have helped identify psychological conditions under which adrenal

hormone levels may be diminished, as well as the more familiar distress conditions under which they are elevated. They are significant in terms of future attempts to modify detrimental effects of stress.

A major 2-year study completed during this period dealt with the behavior of competent adolescents in making the transition from high school to college, with the aim of delineating factors contributing to successful adjustment. Findings from this study are being compared with those from a related study of severely disturbed college freshmen, in an attempt to discover crucial factors that impair the effectiveness of disturbed students.

At the Institute's Addiction Research Center, Lexington, Ky., research centered not only on addiction liabilities of new drugs but also on the physiological and psychological characteristics of the addict and post-addict. Special efforts have been devoted to stimulating effective follow-up programs on discharged addicts; to this end, consultation and information services have been provided for communities, and for professional and lay persons. In an effort to trace the influence of specific drugs, neurophysiological studies were initiated. Because addiction has its roots in neurological character disorders, its investigation contributes substantially to our understanding of many aspects of human behavior.

TRAINING

The Institute seeks to produce qualified manpower needed for a comprehensive mental health program. The training program has been directed at overcoming the shortage of qualified personnel in all areas of professional activities, including clinical services, teaching, research, consultation and administration.

Support for the Institute's psychiatric training program for general practitioners was extended; grants were made to encourage interdisciplinary training of biological and social scientists; and a new program of research career awards was launched.

COMMUNITY SERVICES AND PROGRAM DEVELOPMENT

Revolutionary changes in mental hospitals have made possible the return of many more patients to the community, thus increasing the community's responsibility for care and rehabilitation. The Institute's Community Services Branch, which aids in mobilizing the resources of state and local mental health programs through consultation and regional representation, encouraged dissemination of research information to states and communities.

An expanded program of Mental Health Project Grants, awarded for the development of new and improved methods of care, treatment

and rehabilitation, has stimulated demonstrations and field projects, focusing on preventive and after-care services. The critical areas of juvenile delinquency, alcoholism, suicide, mental retardation, schizophrenia, aging and school mental health received special emphasis.

Institute of Neurological Diseases and Blindness

Faced with a staggering total of 20 million persons, in the United States alone, afflicted with neurological and sensory disorders, the Institute, in the past year, has vigorously conducted and supported research on these handicapping and crippling diseases. A number of significant advances have been made.

COLLABORATIVE PERINATAL RESEARCH

Continuing emphasis has been centered on the serious disorders of infancy and childhood, which include cerebral palsy, mental retardation, congenital malformations of the nervous system, and congenital blindness and deafness. For the past 4½ years, including 2½ years of preparation, the Institute has directed a long-term collaborative research project to demonstrate possible relationships between conditions existing during pregnancy, delivery, and early life and the later occurrence of neurological or sensory disorders. As of the end of 1960, the 15 collaborating institutions had collected data on some 13,500 expectant mothers and 8,000 babies. It was expected to take several more years to enroll and collect data on the 50,000 expectant mothers and their children who are to be used in this research. Preliminary analysis of the facts obtained is already providing research leads and new knowledge which may be important in prevention of these tragic disorders.

In addition, the collaborating institutions are carrying out numerous studies in areas which relate to the overall project. In one of these, a rapid test to diagnose infections of the newborn baby, through the microscopic examination of the umbilical cord, has been devised and is permitting prompt life-saving therapy.

NEUROLOGICAL RESEARCH

Grant-supported studies have yielded additional insight into diseases and conditions which cause mental retardation in infants. This year, new forms of inborn chemical disorders have been demonstrated, and for one (maple sugar urine disease) a promising dietary therapy has been developed.

Surgical research on temporal lobe epilepsy, conducted at the Institute, has altogether freed a large number of patients from seizures, and in others has greatly reduced the number and severity of seizures.

Complex chemical changes occurring in the brain during epileptic seizures have been further explored by both Institute and grantee investigators, who have demonstrated that certain chemical reactions influence the patient's susceptibility to seizures.

Seeking ways to conquer the demyelinating diseases such as multiple sclerosis, grantees have devised an ingenious method to induce the actual process of nerve demyelination in tissue culture, where it can be carefully and directly observed and studied. Of extreme importance has been the discovery of a "vaccine" that suppresses the myelin-destroying effects of a disease of animals which is similar to human multiple sclerosis.

Through Institute research, advances have been made in our knowledge of the debilitating neuromuscular disorders. The chemical basis of one form of muscle disease—familial periodic paralysis—has been established. In treating myasthenia gravis, a new drug (galanthamine) may prove a useful addition to the means of controlling disability.

RESEARCH ON SENSORY DISORDERS

During the year, research has scored considerable gains against the varied and insidious diseases which cause blindness. Techniques for cataract surgery have been refined, and Institute scientists have completed evaluations of alpha-chymotrypsin, a compound which simplifies surgery in some cases. Studies of glaucoma have produced more effective drugs for treatment, and mass screening methods are providing early diagnosis before irreparable loss of vision begins. Through supported studies, a new method of healing retinal detachment has been perfected—an intense light focussed on the eye's surface seals the retina in place and prevents further detachment.

Grant-supported investigations of hearing disorders have also resulted in noteworthy advances. New surgical techniques are providing more effective relief of otosclerosis—a common cause of deafness in middle age—and of certain forms of vertigo. In some cases, highly specialized techniques can now show whether impairment is caused by disease or by defects in the brain or nerve pathways; each requires its own treatment. Improved diagnostic methods now make possible accurate testing and treatment of infants and young children before speech development is hampered.

COOPERATIVE AND INTERNATIONAL RESEARCH

Two cooperative studies supported by the Institute have yielded new information regarding prevention and treatment of cerebrovascular diseases. In a study of intracranial aneurysms, careful analysis of case histories is showing what types of patients are best suited for specific medical and surgical therapies. An evaluating study

of anticoagulant drugs has pointed out both the benefits and risks of such treatments.

An Institute-supported cooperative study on glaucoma continues to seek better methods of screening and diagnosing this blinding eye disorder. A glaucoma family study, undertaken by grantees at one of the participating institutions, is confirming the heavier incidence of glaucoma among relatives of persons with the disease.

In view of unique opportunities for international epidemiological and cooperative investigations, the Institute is continuing to evaluate research potentials and contributions of a number of foreign countries. Limited support is now being provided for specially selected foreign investigations. Under the Institute's regular research-grant program, 36 independent projects are being supported in 19 different countries. Also among our international research activities is a grant to the World Federation of Neurology to support the planning of a worldwide study of the epidemiology and neuropathology of strokes.

During the year, the second Institute-sponsored mission of American scientists to the U.S.S.R. surveyed Soviet progress in the field of maternal and child care. A report, prepared by the first medical exchange mission, presented observations on Soviet research activities in the physiology and pharmacology of the nervous system.

Division of Biologics Standards

This Division administers those provisions of the Public Health Service Act which establish standards for the safety, purity, and potency of biological products in interstate and foreign commerce. The Division issues licenses for the production and sale of such products, which include the vaccines, antitoxins, therapeutic serums, and human blood and its derivatives, and which are developed, for the most part, from pathogenic or potentially pathogenic microorganisms, under carefully controlled conditions, to minimize hazards and ensure satisfactory potency. Additional safeguards are provided by the preparation and distribution of physical reference standards to manufacturers and laboratories engaged in biological standardization throughout the world. Approximately 4,000 vials of such standard preparations are distributed annually by the Division.

At the close of the fiscal year, 190 establishment licenses and 277 product licenses were in effect, the latter covering 1,220 specific products. Tests of approximately 8,000 individual lots of various biological products were made, ranging from relatively simple sterility tests to potency determinations involving both animal and tissue-culture tests.

The Division's research seeks improved standards for production and testing of biologics. The development of standards for the pro-

duction of live, oral poliomyelitis vaccine dominated the year's activities. This was a complex and difficult task, conducted in an atmosphere of intense public interest. The standards were adopted on March 22 and it is anticipated that the vaccine will be available before the 1962 polio season begins.

The rise in potency of the inactivated poliomyelitis vaccine continued during the year and a change was proposed in the regulations to raise by 50 percent the minimum acceptable level of potency.

Viral hepatitis—the contamination of blood products by the virus associated with homologous serum jaundice—is a serious problem and of interest to several groups in this Division. Under investigation is an agent—recovered in tissue culture by a Division investigator—which may have some relation to viral hepatitis in man.

Potentially important is the discovery of the variable sensitivity of different types of virus to photodynamic inactivation with toluidine blue dye. Poliovirus is highly resistant to this technique, whereas many of the adventitious agents of simian origin are sensitive to it. Differential inactivation of contaminating viruses in preparations of live poliovirus grown in monkey kidney tissue appears to be feasible and may be useful in manufacturing live attenuated poliovirus vaccines.

A safe procedure for separating platelets from red blood cells and plasma, using simple plastic equipment, has been developed by a Division scientist working with Cancer Institute investigators in studies of the use of platelets in leukemia. As part of this work, the effects on donors of repeated large platelet donations by plasmapheresis are being investigated to establish needs for specific control procedures.

Measles immunization, which appears feasible within the immediate future, has emphasized the need for reliable detection and measurement of measles antibodies. To establish a basis for standardization, a study of variables in test procedures was made, and a standard antiserum was prepared to serve as an internal control.

Division of General Medical Sciences

This Division administers the NIH grant and fellowship programs for research and training in the sciences basic to medicine and biology, public health, and certain clinical areas not covered by Institute programs, and directs the new Center for Research in Child Health, the Center for Aging Research, and the General Clinical Research Center Program.

To meet current medical needs for basic knowledge—in addition to research into specific disease categories—DGMS programs are stress-

ing fundamental studies of organic life. This trend is effecting a convergence of previously separate approaches, with resultant increases in control of both normal and abnormal biological events.

Consistent with the above development is the Division's aim to systematize still incomplete fields of biomedical knowledge. With this in mind, the Division's research programs have been organized into five main areas: (1) Chemistry of Life Processes, (2) Developmental Biology, (3) Clinical Sciences, (4) Public Health, Medical Care, and Nursing, and (5) Methods and Tools of Science. The first two—covering the physiological events of reproduction, genes, growth and development, disease, aging, and death—receive about half of the Division's research funds.

Out of these efforts have come new insights. A clearer definition of the gene in its effect on the total organism is emerging, and work in progress with deoxyribonucleic acid (DNA) and ribonucleic acid (RNA) no longer seems remote from practical application. A grantee in Israel has provided evidence suggesting that the RNA complex makes and stores the antibodies which form during immunologic reactions. The greatest obstacle at present to organ transplantation is immunologic in nature, and the solution of the difficulties of replacing vital organs will be found in such basic research. There have been revelations on the response to drugs of the microsomes of liver cells. A new method for direct biochemical studies of components in the living intact cell is under development. New discoveries suggest that unsaturated fatty acids play important metabolic roles in tissues and cells. Experimental evidence indicates that congenital defects are associated with vitamin E deficiency.

Although contributions from the fundamental biological sciences have been numerous, research continues to outstrip training, and critical personnel shortages persist. The Division's training programs seek increased output of qualified researchers and teachers in these basic sciences. Grant funds are available to public and private nonprofit institutions (such as medical schools) for initiating or improving graduate research training. Since July 1958, when DGMS was providing support for training only in epidemiology and biometry, regular programs have been established in 11 additional fields: Anatomical sciences, biochemistry, biomedical engineering, biophysical sciences, developmental biology, genetics, microbiology, nutrition, pathology, pharmacology, and physiology. At the end of this period, the Division was furnishing aid in 20 fields for 440 separate research training programs across the country.

The research fellowship program provides outstanding students and scientists at various academic levels with opportunities for intensive training in the shortage areas. Support, in this period, was granted to 2,307 fellows.

The medical student research training program has continued the successful experiment, begun in 1957, under which carefully chosen applicants are specially instructed to develop latent abilities and stimulate interest in research and teaching careers.

The general clinical research center program was established in the fall of 1959 at the direction of the Senate Committee on Appropriations to help meet national needs for improvement and intensification of clinical research. The program awards grants to medical schools and other research institutions to provide an adequate means for precise observations and control of research, and to extend laboratory investigations in animals into valid correlative studies in human beings. During fiscal year 1961, DGMS awarded 24 more grants for general clinical research centers, bringing to 32 the number of such centers established since the program's beginning in 1960.

CENTER FOR RESEARCH IN CHILD HEALTH

In February 1961, the Surgeon General, at the President's direction, established a Center for Research in Child Health. Placed in the Division of General Medical Sciences, the Center seeks to stimulate research in health problems of childhood and adolescence.

CENTER FOR AGING RESEARCH

The Center for Aging Research has continued to grow, with grants for research in aging increasing from approximately \$12.5 million on January 31, 1960, to more than \$16 million on January 31, 1961. A fifth large interdisciplinary program in aging research has been established at Brown University. Other like programs, with NIH support, are located at Western Reserve University, University of Miami School of Medicine, Duke University, and the Albert Einstein College of Medicine.

During fiscal year 1961, Center personnel assisted in the White House Conference on Aging and helped the Federal Aviation Agency determine the functional age of pilots.

Division of Research Grants

The Division of Research Grants continued to administer and coordinate the grant and award program—\$453 million, in this period—of the National Institutes of Health, and to provide both technical assistance and review and appraisal services for the other grant-awarding units of the Public Health Service. Functions included processing and scientific or technical review of grant applications; providing fiscal, statistical, and information services; and direct management of the \$30-million-a-year Health Research Facilities Construction Program.

Reorganization of the Division was necessitated by growth of the whole Public Health Service grant program. A Career Development Review Branch was formed to consolidate all the Division's responsibilities in fellowships, traineeships, and training grants. A Special Program Review Branch, with responsibility for program-project grants and center grants, was established within the Division. Program-project grants, as contrasted with the traditional research-project grants, are for support of broad-based and usually long-term research programs, while center grants are solely for support of physical resources, excluding new construction, and are usually clinically oriented.

To handle the mounting volume of applications for grants, the number of study sections comprising the Research Grants Review Branch was increased from 36 to 40. These study sections, whose primary function is technical review of applications, have continued to stimulate meetings and seminars for exchange and publication of information on specific health problems.

Division of Research Services

NIH took a major step in expanding its use of electronic processing of medical research data by arranging for installation of a new high-speed computer. This will be paralleled by an increase in the variety of data-processing and programming services available centrally through this Division. In anticipation of this development, DRS accelerated its recruitment and on-the-job training of mathematicians, engineers, and other technical personnel required in the data-processing program.

This Division provides a wide range of other central technical and professional services and skills in support of Institute programs, such as the design and construction of unique environmental chambers. During this period, the Division completed a plant-growth chamber for the Mental Health Institute, blood-serum cold-storage rooms for the Neurological Institute, a low-level radiation counting facility for the Cancer Institute, and a hydrogenation laboratory for use by all Institutes.

As part of a new central service, DRS veterinary scientists made plans for the production of specific pathogen-free animals under controlled environmental conditions. Allied planning called for transfer of the overflow in standard animal-production and -holding services to the new animal farm on completion of the needed facilities. As a first step, the existing buildings on the new farm were remodeled and all farm animals moved to the new location.

Highly successful performance tests with gaseous ethylene oxide, in the Division's environmental health service, now permit routine sterilization of surgical rubber gloves, plastic catheters, patients'

telephones, and other heat-sensitive items used in patient care. In other environmental studies, the search for a satisfactory means of detecting staphylococcal organisms was rewarded with a quite reliable test employing a modified commercial medium in which fresh egg yolk is the essential added ingredient. The modified medium also makes possible direct identification of coagulase-positive staphylococci found in areas that tend to be heavily contaminated with other types of bacteria.

Reorganization of the Division's visual arts program was aimed at integration of central medical arts and photographic services, and a new focus on scientific film production. A study designed to increase the medical library's usefulness had its initial effects in the stepped-up purchasing of scientific books and journals, and the inauguration of a new automatic photocopying service was expected to increase the circulation life of individual volumes.

Clinical Center

The Clinical Center's mission is to provide the specialized forms of hospital care necessary for contrasting studies of normal and abnormal physical and emotional conditions in man. In fulfilling its aim, the Center encourages interdisciplinary exchange of ideas and maintains an environment conducive to research and training.

For the third year, optimal utilization of hospital beds was maintained, with a satisfactory number of research patients being referred by physicians from all sections of the United States and from many foreign countries.

Gratifying success has attended the recruitment of Normal Volunteer control patients. Howard University has been added to the list of sponsoring agencies and arrangements with the Federal Bureau of Prisons have been expanded to include volunteers from midwestern penitentiaries so that three studies of infections may now be carried out where only one was possible previously.

Further automation in the Clinical Pathology Department has made possible a greater number and variety of tests, with more exacting quality control—a development of prime importance, since the Clinical Center's research mission requires such tests on a far greater scale than do general hospitals.

Conclusion

From the foregoing pages it can be seen that fiscal year 1961 was a year of great activity for the Public Health Service—and for the other forces in our society which contribute to better health for the American people. Medical and related research continued at a high level, and many productive results were achieved. Many new hospi-

tals, research centers, and other health facilities were built or planned. Health services of various kinds—particularly for the chronically ill and aged—were launched or strengthened. Increased attention was focused on the health problems associated with the complex modern environment.

The Public Health Service played a central role in many of these developments. Following a penetrating self-study and evaluation, it began a process of reorganization to prepare for its expanding responsibilities in the decade ahead. This process is still under way. With the strength that comes from partnership effort, the Public Health Service hopes to continue to advance human health in this country and throughout the world in the years to come.

Table 1.—Statement of appropriations, authorizations, and obligations, fiscal year 1961

[In thousands]

Appropriations	Funds available for obligation				Total funds available	Amounts obligated
	Appropriations and authorizations	Net transfers between appropriations	Repayments for services	Prior year unobligated balances		
Total	\$1,039,606	0	\$42,565	\$142,630	\$1,233,584	\$1,058,324
Appropriations, PHS	1,039,065	0	42,565	142,546	1,224,176	1,050,176
Control of tuberculosis	6,493		35		6,528	6,494
Assistance to States, general	27,277	—142	259		27,394	27,057
Communicable disease activities (1961-62)	1,000				1,000	108
Communicable disease activities (1961)	14,393		898		15,291	15,256
Environmental health activities	27,768		1,355		29,123	28,895
Foreign quarantine activities	5,110		335		5,445	5,372
Hospitals and medical care	55,823		5,960		61,783	61,707
Salaries and expenses, hospital construction services	1,736				1,736	1,719
Indian health activities	50,177		797		50,974	50,545
Construction of Indian health facilities	9,714			3,790	13,504	9,005
Grants for hospital construction (1961-62)	186,200				186,200	61,680
Grants for hospital construction (1960-61)				127,050	127,050	126,272
General research and services, National Institutes of Health	83,900				83,900	83,572
National Cancer Institute (1961-62)	700				700	8
National Cancer Institute (1961)	110,300		10		110,310	106,264
Mental health activities	100,900	—5,139	63		95,829	92,120
National Heart Institute	86,900		28		86,928	86,267
Dental health activities	15,500				15,500	14,617
Arthritis and metabolic disease activities	61,200		437		61,637	59,046
Allergy and infectious disease activities	44,000		1		44,001	43,780
Neurology and blindness activities	56,600	—7,000			49,600	48,348
Operations, National Library of Medicine	1,738		35		1,773	1,758
Grants for waste treatment works construction (1961-62)	45,000				45,000	38,493
Grants for waste treatment works construction (1960-61)				5,277	5,277	5,277
Grants for waste treatment works construction (1959-61)				1,816	1,816	1,811
Retired pay of commissioned officers	1,927				1,927	1,927
Salaries and expenses	7,226	142	189		7,557	7,477
Grants for construction of health research facilities	30,000		1		30,001	29,985
Bureau of State Services management fund			4,262		4,262	4,234
National Institutes of Health management fund			27,678		27,678	27,580
Scientific activities overseas (special foreign currency program)	3,707				3,707	28
Buildings and facilities	3,776			4,548	8,324	3,298
Construction of mental health, neurology research facility		12,139			12,139	11
Consolidated working fund, HEW, grants for research			217	65	282	165

See footnotes at end of table.

Table 1.—Statement of appropriations, authorizations, and obligations, fiscal year 1961—Continued

[In thousands]

Appropriations	Funds available for obligation				Total funds available	Amounts obligated
	Appropriations and authorizations	Net transfers between appropriations	Repayments for services	Prior year unobligated balances		
Appropriations, special project funds made available by other agencies.....					8,782	7,804
Salaries and expenses, Bureau of Prisons, (transfer to HEW, PHS).....					2,338	2,337
American Sections, International Commissions, State (transfer to HEW, PHS).....					78	73
Salaries and expenses, Office of Civil and Defense Mobilization, (transfer to HEW, PHS).....					364	360
Research and development, Office of Civil and Defense Mobilization, (transfer to HEW, PHS).....					88	85
Emergency supplies and equipment, Office of Civil and Defense Mobilization, (transfer to HEW, PHS).....					1,009	1,006
Farm labor supply revolving fund, Bureau of Employment Security, (transfer to HEW, PHS).....					499	463
Civil defense and defense mobilization, functions of federal agencies, (transfer to HEW).....					1,054	1,042
Administrative expenses, Section 411 Mutual Security Act, (transfer to HEW).....					38	37
Technical cooperation, general, executive (transfer to HEW).....					2,818	1,965
Defense support, general, executive, (transfer to HEW).....					105	63
Special assistance, general executive, (transfer to HEW).....					270	257
Grants, Cuban refugee health program, (transfer to HEW).....					91	86
Military assistance, executive, (transfer to HEW).....					30	30
Gift funds donated for general and specific purposes.....	541.1			84.4	625.9	344.1
Contributions, Indian health facilities.....	308.7				308.7	130.1
Public Health Service unconditional gift fund.....	24.7			11.9	36.7	5.9
Public Health Service conditional gift fund.....	29.1			38.8	67.9	57.0
Patients' benefit fund, Public Health Service hospitals.....	43.7			24.2	68.2	48.9
Special statistical work, vital statistics.....	134.9			9.5	144.4	102.2

¹ Includes \$435,000 contract authorizations, and excludes \$529,000 liquidation of prior contract authorization.

² Does not include \$8,000 to be deappropriated.

Table 2.—Commissioned officers and civil service personnel as of June 30, 1961

	Full-time				Part-time					
	Grand total full time	Commis- sioned officers	Civil Service			Total part time	When actually employed	Without compen- sation	Other	
			Total	Washing- ton metro- politan area	States					Outside United States
Public Health Service.....	28,630	2,397	24,651	10,894	12,458	1,299	1,364	723	215	426
Office of the Surgeon General.....	1,130	191	939	894	45		83	33	44	6
Immediate Office of the Surgeon General.....	34	8	26	26			1		1	
Division of Finance.....	141		141	139	2					
Division of Administrative Services.....	139	9	145	94	36					
Office of Personnel.....	163	18	145	145	4		5	1		
Division of Public Health Methods.....	80	5	75	71	4					
Division of International Health.....	33	8	25	25			1		1	1
Division of Health Mobilization.....	83	11	72	69	3		8	5	3	
National Center for Health Statistics.....	283	5	278	278			67	27	39	1
Offices other than Immediate Office of the Surgeon General (Information, Executive).....	47		47	47			1		1	
Details to other agencies.....	127	127								
Bureau of Medical Services.....	13,368	1,734	11,634	1,262	9,220	1,152	635	388	49	198
Office of the Chief.....	30	4	26	26						
Division of Foreign Quarantine.....	619	40	579	36	462	81	45	34	6	5
Division of Hospitals.....	6,505	1,059	5,446	232	5,192	22		348	220	108
Freedmen's Hospital.....	846		846	846			33		9	24
Division of Indian Health.....	4,983	421	4,562	111	3,402	1,040	207	133	14	60
Details to other agencies.....	385	210	175	11	164		2	1		1
Bureau of State Services.....	5,328	1,157	4,171	1,321	2,780	70	282	152	95	35

Table 2.—*Commissioned officers and civil service personnel as of June 30, 1961—Continued*

	Full-time				Part-time				
	Grand total full time	Commiss- ioned officers	Civil Service			Total part time	When actually employed	Without compen- sation	Other
			Total	Washing- ton metro- politan area	States	Outside United States			
Office of the Chief.....	149	10	139	139			13	2	10
Division of Dental Public Health & Resources.....	126	31	95	92	3		32	27	1
Division of Chronic Diseases.....	378	138	240	191	49		13	2	4
Division of Radiological Health.....	460	173	287	166	121		11	6	4
Division of Nursing.....	67	20	47	47			2		2
Division of Engineering Services.....	337	44	293	53	240		11	2	3
Division of Water Supply and Pollution Control.....	375	87	288	133	155		24	23	1
Division of Community Health Practice.....	210	37	173	118	54		61	13	48
Division of Air Pollution.....	268	56	212	76	136		6	5	1
Division of Hospital and Medical Facilities.....	116	6	110	107	3		2	1	1
Division of Occupational Health.....	144	35	109	23	86		7	4	2
Division of Accident Prevention.....	96	9	87	87					
Communicable Disease Center.....	1,447	244	1,203	99	24		90	58	20
Regional Offices.....	1,143	255	888	14	1,092	12	10	9	12
Details to other agencies.....	12	12			870	4			1
National Institutes of Health.....	8,587	896	7,691	7,209	405	77	359	146	27
Office of the Director.....	974	4	970	970			10	1	8
National Cancer Institute.....	1,154	157	997	881	115		47	18	27
National Heart Institute.....	551	117	434	341	92	1	33	12	2
National Institute of Allergy and Infectious Disease.....	587	100	487	237	155	35	11	6	19
National Institute of Arthritis and Metabolic Diseases.....	520	109	411	410		1	27	14	5
National Institute of Dental Research.....	174	47	127	127				5	8
National Institute of Mental Health.....	757	99	658	617	39		15	11	4
National Institute of Neurological Diseases and Blindness.....	485	43	442	402	3	2	79	32	7
Clinical Center.....	1,553	135	1,418	1,418		37	29	22	40
Division of Biologics Standards.....	221	23	198	198			44	1	5
Division of Research Grants.....	489	15	444	444			5	6	37
Division of Research Services.....	1,039	36	1,003	1,002	1		35	14	8
Division of General Medical Sciences.....	111	9	102	102			21	3	11
Details to other agencies.....	2	2					10	8	2
National Library of Medicine.....	217	1	216	208	8				
							5	4	1

¹ Excludes these part-time employees not in pay status during the month of June 1961.² Includes 1,803 Regular Corps Officers, 2,025 Active Reserve Officers, and 151 Commissioned Reserve Officers on Temporary Training Duty.

Table 4.—*Payments to States, fiscal year 1961*¹
[In thousands]

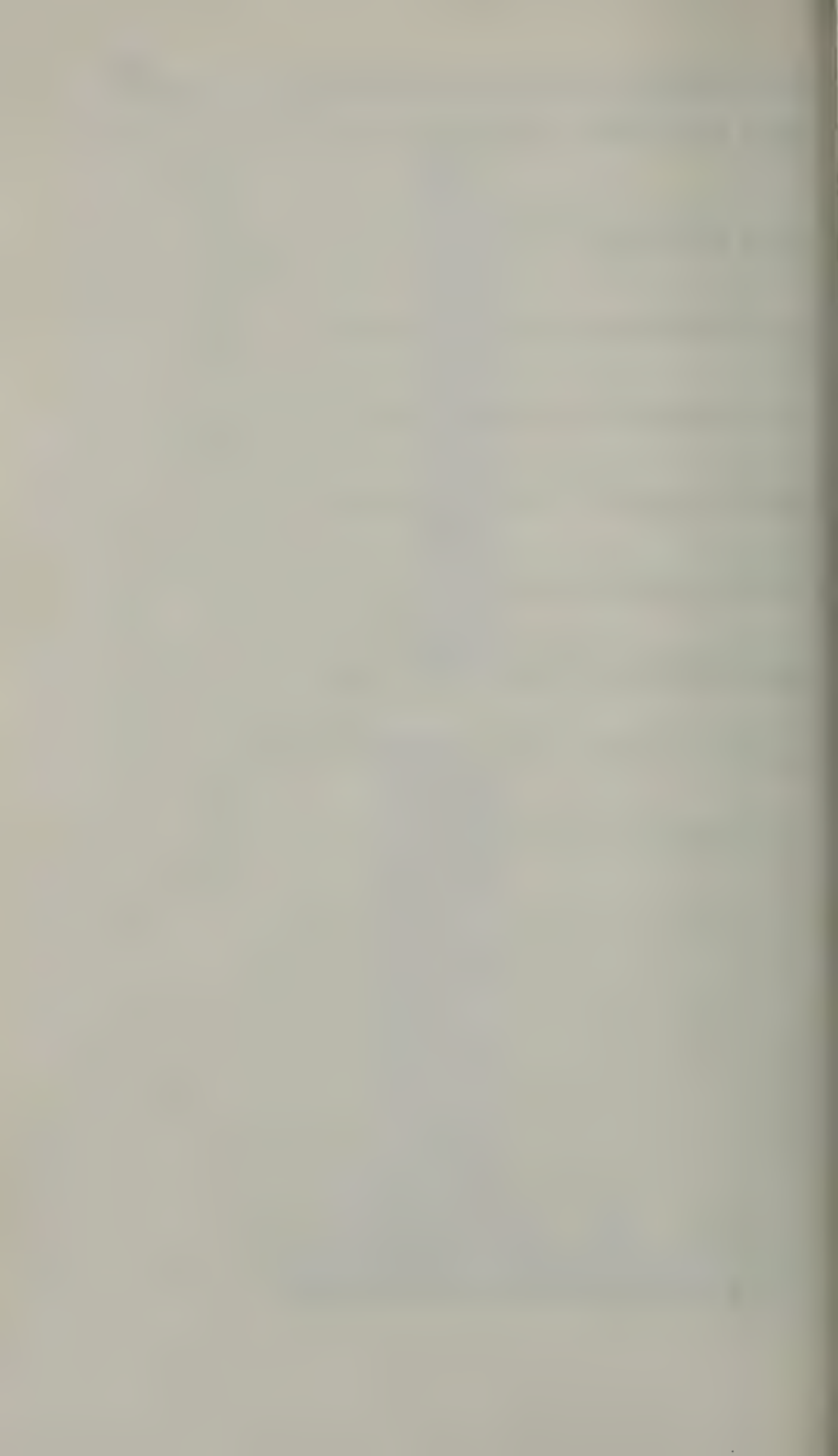
State	Veneral disease special projects	Tuberculosis control	General health	Mental health	Cancer control	Heart disease control	Water pollution control	Hospital and medical facilities construction	Waste treatment works construction
Total	\$2,380	\$3,982	\$16,755	\$5,941	\$3,314	\$3,360	\$2,943	\$157,004	\$14,079
Alabama	43	93	440	118	75	86	57	4,575	1,239
Alaska	7	23	63	38	1	8	14	202	559
Arizona	22	45	141	37	19	61	24	1,564	3,410
Arkansas	81	61	208	67	47	174	39	3,410	2,215
California	50	288	1,015	397	224	35	138	1,490	572
Colorado	8	33	178	52	35	47	29	875	525
Connecticut	8	37	143	68	30	25	43	256	457
Delaware	12	16	51	41	20	23	30	171	374
District of Columbia	79	37	56	36	25	32	25	3,992	765
Florida	80	94	466	153	88	93	63	5,757	962
Georgia	205	86	454	135	82	93	60	1,169	273
Hawaii		21	69	41	18	32	26	1,762	418
Idaho	6	15	101	41	26	35	20	4,673	2,106
Illinois	179	211	688	302	110	119	95	2,657	1,040
Indiana		79	328	120	81	80	67	2,421	754
Iowa	9	36	264	92	27	33	45	2,891	508
Kansas	14	32	229	69	45	51	35	4,620	907
Kentucky	44	102	404	112	72	83	56	3,762	1,049
Louisiana	64	79	344	109	67	71	52	806	204
Maine		22	114	41	19	8	25	2,610	600
Maryland	47	84	245	93	51	61	52	3,215	1,159
Massachusetts		99	374	142	90	79	76	3,714	588
Michigan	66	152	620	243	129	111	99	3,166	621
Minnesota	5	47	332	105	61	62	50	3,985	858
Mississippi	37	60	392	90	64	79	51	2,236	510
Missouri	64	94	387	134	84	80	58	791	416
Montana	7	20	94	41	16	19	19	728	458
Nebraska	13	13	171	47	30	14	24	2,186	408
Nevada	10	13	51	38	9	11	10	7,055	2,738
New Hampshire		14	52	39	15	18	24	9,804	1,385
New Jersey	35	112	407	175	99	82	81	2,636	408
New Mexico	30	33	123	41	26	39	21	7,055	2,738
New York	397	391	1,122	487	274	193	170	9,804	1,385
North Carolina	120	86	586	164	97	110	77	2,186	408
North Dakota	12	16	107	41	26	36	20	7,055	2,738

Ohio.....	19	177	761	284	166	137	116	6,308	1,673
Oklahoma.....	19	51	260	76	50	58	37	1,764	1,035
Oregon.....	9	34	185	85	30	27	31	1,642	1,697
Pennsylvania.....	124	248	929	352	210	157	134	8,556	2,601
Rhode Island.....		22	74	41	26	36	35	810	73
South Carolina.....	97	59	354	92	58	76	52	3,550	791
South Dakota.....	8	6	109	40	9	3	20	593	419
Tennessee.....	100	104	435	125	71	86	61	6,130	1,811
Texas.....	148	181	948	299	173	162	107	7,744	2,020
Utah.....		7	106	15	18	17	22	1,276	485
Vermont.....		15	53	39	26	28	20	615	678
Virginia.....	37	94	421	133	76	81	60	5,193	1,197
Washington.....	7	51	248	87	52	52	40	1,991	640
West Virginia.....	15	54	223	60	43	57	38	4,375	912
Wisconsin.....		60	341	118	73	67	62	3,333	886
Wyoming.....	2	11	59	29	9	22	15	3,398	147
Guam.....		9	8	23	6	3		10	
Puerto Rico.....	27	147	373	85	60	77	14	2,945	169
Virgin Islands.....	5	8	9	39	6	6	4	104	

¹ Additional amounts as follows were paid during fiscal year 1951: \$1,992,000 under title I for the Public Health Service traineeship program, \$6,100,000 under title II for the professional nurse traineeship program, \$951,000 to schools of public health for the provision of public health training, \$447,000 for project grants for graduate training in public health, \$122,000 for the Public Health Service air pollution training and demonstration program, \$135,000 for project grants for training in radiological health, \$86,000 for the Cuban refugee health program, \$1,306,000 for community cancer demonstration and training projects, including \$49,000 personal services in lieu of cash, \$2,446,000 for the Alaska grant for hospital construction.

² Includes \$948,000 in services and supplies furnished in lieu of cash.

³ Excludes \$249,000 paid to water pollution interstate agencies as follows: \$13,000 to New England Interstate Water Pollution Control Commission, \$108,000 to Ohio River Valley Water Sanitation Commission, \$41,000 to Interstate Commission on the Delaware River Basin, \$58,000 to Interstate Sanitation Commission, \$26,000 to Interstate Commission on the Potomac River Basin, \$3,000 to Klamath River Compact Commission.



Office of Education

SECTION I

Introduction: Quality Education

WE CANNOT NOW BE SATISFIED with any educational endeavor that is not genuinely committed to the highest standards of which we are capable. Whatever may be the disposition of some individuals, the Nation cannot afford anything less than excellence in every aspect of education. At every step of the educational ladder we must make those demands for achievement that will call forth the full capabilities of every student.

We have frequently been guilty of following a path of inordinate ease and comfort in our educational policy and practice. All too often we have sacrificed excellence to a large measure of mediocrity, because we have been unwilling to pay the price that excellence demands—rigor, discipline, and genuinely hard work.

Mastery of Fundamentals Necessary

We are in some difficulty at every level, because in our effort to relate education effectively to the lives of the students we have too often divided and splintered until far too much of our energy is dissipated on unrewarding peripheral detail or trivial matters that deserve no place in the economy of a serious formal education. An intensive mastery of fundamental principles and techniques that will have general theoretical application or practical usefulness should replace the not infrequent expansiveness that has made the curriculum attractive and interesting, but sometimes somewhat superficial. We have done well to encourage broad general education. But it is wise to remember that one cannot know anything in general without knowing something in particular. It is education in the most basic sense, whether it be in the humanities, the social or natural sciences, in technology or the professions that will be most rewarding to the individual and at the same time will best satisfy the needs of our

society in providing adequate manpower for our trades and professions and in guaranteeing the expansion of knowledge and the disciplined habits of mind that are so crucial to the well-being of our people.

Students' Capabilities Must Be Challenged

To the extent that we have failed to challenge the full capabilities of our students, from kindergarten through graduate school, we have betrayed the democratic ideal that is so precious to us. The meaning of democracy in education is not found in a dead-leveling process that attempts to conform all men to a simple equality. We believe not that all men are of equal capacity, but that all are entitled to the opportunity to develop fully such capacities as they have. We combine this with a belief in the inherent dignity of the individual person. These are powerful ideas with tremendous implications. They mean, certainly, that the creative artist, the professional person, and the artisan alike deserve the full esteem of their fellow men and that every man is entitled to his measure of self-respect who is doing his best in a vocation that contributes to the total life of our society.

When we demand in our schools and elsewhere something less than the individual is capable of doing, we rob him of his self-respect and we corrupt our most basic ideals. We have been too often guilty on this count, and our schools must bear a large measure of responsibility for that guilt.

A Twofold Task

The task facing the leaders of American education is so to organize and administer our educational institutions that the best interests of every individual will be served and that this process will at the same time contribute to the fundamental quality of our culture and add genuine strength to our national character. We must make sure that the maximum cultivation of the individual's intellectual, moral, artistic, and spiritual capacities that makes of him a genuinely free person yields also the protection and perpetuation of those institutions that are essential to a free society.

Here two things should be kept foremost in our thinking. First, that the total education of an individual is a task in which all of our social institutions participate. The schools should not be expected to do everything. Their primary task is the achievement and dissemination of knowledge and the cultivation of the intellect. It is only when this task is firmly established as the central purpose of

a school that it will produce effectively those results in personal and civic character that we rightly expect of it.

Secondly, we must guard against the tendency to suppose that our national well-being is served primarily by advances in technology, however important and timely these may be. Knowledge is of value for its own sake as well as for its uses, and unless the sciences are supported in their own right the capital of knowledge on which our technology is nourished will surely diminish. The social sciences and the humanities and fine arts are as important to the quality of our culture and eventually to the strength of our Nation as are engineering and the physical sciences. The study of politics, history, and philosophy is fundamental to our cultural life, and no nation can achieve a lasting strength unless its character is expressed in great literature, art, and music.

We should not fear that a more effective accommodation of education to social needs and national goals must destroy the freedom and individual initiative and creativity of our people. On the contrary, countless persons would thereby find a new freedom: through institutions designed for their peculiar abilities on the one hand and the needs of our social and economic order on the other, they would be brought into the educational process on a higher level.

Teaching, the Basic Problem

The quality of teaching is our basic educational problem. It will not be solved until all our teachers have the competence that is now enjoyed by those whom we all recognize for their great and inspiring work in our classrooms, seminars, and laboratories.

The identification and education of teachers for our schools is now a matter of major concern for the Nation. It is a national tragedy that the generality of our teachers are not fully qualified to assume the burden of responsibility that we must place upon them in the future. Many are lacking the native talent demanded by the art of teaching. Others in large numbers are inadequately prepared by general education or education in their teaching specialities. The responsibility for this rests partially upon our society as a whole, for it has failed to raise the teaching profession to that level of stature and esteem that would make it attractive to highly talented people in numbers adequate to fully satisfy the demand for qualified teaching personnel, and our public leaders have not insisted that our colleges and universities devote their best efforts to the education of teachers.

It would be unwise to suppose that this predicament of the teaching profession is due simply to inadequate salaries for teachers, even

though the problem will never be solved until the average salary level of the profession is made competitive with that of other employed professions. It is due in part at least to the fact that the education of prospective teachers in our society has quite commonly failed to fully challenge the intellectual abilities and creative talents of the more capable segment of our students. Persons of high ability look to a profession that demands rigorous preparation and high competence. The range of students entering our professional education schools is far too wide for the good of our Nation. It encompasses many who enjoy the highest capabilities, but also many who are near failures in any scholastic endeavor.

In the future every effort must be made to identify persons of high intellectual competence and talent in the art of teaching and to attract them to the teaching profession. And the standards of our colleges of education must be raised to exclude those who do not have real promise. The finest education must be made available to those who qualify: first, a genuine and rigorous liberal education in the full sense of that word, an education in the arts and the sciences of the kind that frees the mind, that acquaints it with at least the rudiments of the world's basic knowledge, and cultivates critical and creative intelligence. To insure this kind of education, the education school must become a part of the mainstream of the intellectual life of our universities. The education of teachers is properly the task of the entire faculty, not simply of those who specialize in the teaching art and its related sciences.

It is a national scandal that large numbers of our teachers are inadequately prepared in the subject matter that they teach. We should not be satisfied until this situation is entirely corrected, as its perpetuation is the surest guarantee of mediocrity in the classroom. There will never be a substitute for a teacher's full mastery of his subject.

Finally, education in the art of teaching has too commonly been narrowly conceived in terms of psychological studies descriptive of the learning process. Teaching is an art that must be rooted in the entire gamut of the behavioral sciences as well as in psychology, involving such disciplines as sociology, descriptive ethics, and cultural anthropology. But far more than this, even a simple comprehension of the proper aims of education involves necessarily an intimate knowledge of the value structure of the culture and entails some acquaintance with the essentials of its intellectual and moral tradition. For the meaning of education is found in part in the great task of

understanding, appreciating, criticizing, and perpetuating the culture of which we are a part and in which are lodged our value traditions and commitments. To put it briefly, there is no easy road in the preparation of teachers of the kind that we must now guarantee our schools. Our society will make heavy demands upon them in the future.

Educational excellence, as a goal, is never realized. It is neither visible nor tangible. Perhaps it is not, strictly speaking, a goal at all, but an attitude that informs the total process of education. In any event, we can approach excellence in education only by demanding of all—administrators, teachers, students, and the general public—all that they are capable of achieving. If ever in the past there were reason for asking less, there is none now, for our times are perilous and will accept no less.—*Adapted from a statement by Sterling M. McMurrin, U.S. Commissioner of Education, before the Subcommittee of the Committee on Appropriations, House of Representatives, Eighty-Seventh Congress, First Session, May 8, 1961.*

The Role of the Office of Education

The Office of Education operates in a society in which virtually all responsibility for the conduct of American education rests outside the Federal Government. States and communities have the right to organize and manage their schools and the chief responsibility for financially supporting them. The function of the Office of Education is to “aid the people of the United States in the establishment and maintenance of efficient school systems, and otherwise promote the cause of education throughout the country.”

Cooperation and assistance by the Office are carried on principally through publishing its research findings, studies, and survey reports; through consultation and field work; through participating in contracting with colleges, universities, State departments of education, other public or private agencies, organizations, groups, and individuals to conduct research; and through administering financial assistance programs as directed by the Congress.

From 1867, the year of its founding, to near the middle of the present century, the Office of Education was regarded principally as an agency for the collection and dissemination of information describing the state of American education. But as the educational system became increasingly complex, the Office began analyzing and interpreting this descriptive information. During the past decade, new responsibilities have come to the Office, supplementing but not re-

placing its historic duties. These responsibilities reflect a change in public conviction of the role of the Federal Government in education.

While the American people have never swerved from the belief or the practice of the belief that responsibility for the conduct of American education should remain outside the Federal Government, they have come to use the one Government they have in common to augment and strengthen the activities of the several governments they have separately. Thus the Office is responsible for the execution of public policy as expressed in over 20 separate pieces of legislation, with grant and contract responsibilities amounting to approximately half a billion dollars a year.

Included among the other responsibilities of the National Defense Education Act of 1958, was that given under title X for advising and consulting "with the heads of departments and agencies of the Federal Government responsible for" various "educational programs with a view to securing full information concerning" such programs and "to developing policies and procedures which will strengthen the educational programs and objectives of the institutions of higher education utilized for such purposes. . . ." Thus, out of the expanded role of the Federal Government in our society, a new function and responsibility of the Office of Education has emerged.

Still another new dimension of Office responsibility has come to focus during the last decade. The character of world developments affects educational practices and educational organization. The modern foreign language development program authorized by the NDEA reflects but one area of those practices. The deeper involvement of the United States in international affairs will inevitably lead to identification of other educational needs.

Concurrently and continuously, the Office must be in a position to stimulate, encourage, develop, and strengthen professional leadership in education throughout the Nation. It must help to provide to educational leaders the informational resources essential to the identification and solution of educational problems, in the constant improvement of educational programs, and in securing understanding, cooperation, and support of professional groups and lay citizens of the Nation.

Whatever may be the problems facing the American people in defining the substance of education or in the administration of its educational system, it is the responsibility of educational leaders at all levels to work together to secure that degree of excellence and productivity which the good of society and of our Nation demands.

SECTION II

Examples of Office of Education Leadership in Fiscal Year 1961

The activities cited in this section do not constitute a complete description of Office programs; but rather, they represent the manner in which the Office performed its assignments. The report of principal continuing or recurring Office activities and their part of the general American educational scene will be found in section III. The projects of programs of section II originated, were completed, or were unusually active during 1961.

IDENTIFICATION OF NEEDS OF AMERICAN EDUCATION

The traditional task of the Office has been the collection and dissemination of information vital to "promoting the cause" of American education. This past year saw two major studies completed which placed before the people a measure of the next decade's educational problems.

Two Critical Needs of Our Schools and Colleges: People and Buildings.—The professional staffing and physical facilities of our public schools and our colleges were deemed to be goal areas of prime importance in achieving a higher base of educational development. In 1960 the Office undertook staff studies designed to determine the magnitude of the Nation's requirements in terms of teachers and other professional personnel to be recruited and trained, and in terms of public school and higher education physical facilities to be constructed or restored. These requirements were translated into dollars of national need, without specific reference to the respective shares that would have to be met by Federal, State, local, and private sources.

The studies were completed during fiscal 1961 and were released to the public as the discussion documents (1) *Ten-Year Aims in Education, Staffing and Constructing Public Elementary and Secondary Schools*, and (2) *Ten-Year Objectives in Education, Higher Education Staffing and Physical Facilities*. Each of the papers was developed with the assistance of outside technical experts and received critical review by leaders outside of government, representing the educational community. There was considerable authority, therefore, behind the goal figures they proposed with respect to the number of school teachers, professors, and university researchers needed over the next decade, the average salary levels they would require, and the resultant aggregate national expenditures indicated for educational

manpower and for bricks-and-mortar support of the educational establishment.

Educational Needs in Relation to the Employment Economy: Vocational Education.—Recognizing that changes in occupational patterns and in the demands of the economy were occurring faster than were the educational adaptations needed to meet them, the Office undertook to identify the kind of education required to eliminate the shortages and imbalances. The resulting document, *Vocational Education in the Next Decade*, was released to the public and will be a major source paper for a panel of consultants on vocational education, to be convened in 1962.

ORGANIZATION AND DISSEMINATION OF EDUCATIONAL STATISTICS AND RESEARCH RESULTS

Through the years statistical and research programs have been at the core of Office programs. The following examples indicate developments in fiscal year 1961 to improve and accelerate the process by which new educational knowledge is applied to educational practice:

Dissemination of Results of Educational Research.—For a number of years, the Office of Education has maintained a clearinghouse of studies in higher education which compiles, analyzes, and interprets data on educational research and experiments by colleges and universities with respect to their own programs. During the past year the clearinghouse released its first monographs. Included were titles on college admission with advanced standing and independent study programs.

College and University Inventory of Physical Facilities.—During 1961 the editing and coding of this Inventory was completed. The data provide details of all building facilities for institutions enrolling almost 96 percent of the students in higher education. Analysis of these data can yield information including type of control, estimated value, condition, function of assigned areas, and total cost of physical plant. Periodic reports of new construction will be added to this basic inventory. The Office thus will be able to maintain a current file of almost all higher education facilities in the Nation.

Dissemination of Results From Office Sponsored Research Programs.—The Office's extramural research support programs, particularly projects under Cooperative Research and title VII of the NDEA (Educational Media), occupy critically important positions with respect to the responsibility for extending the frontiers of basic and applied educational knowledge. The final results of all projects completed by 1961 were circulated through the Library of Congress

Documents Expediting Project. Some results were published in the following 1961 Office monographs: *The Gifted Student*, *Motor Characteristics of the Mentally Retarded*, *Social Climate in High School*, *Influence of Voter Turnout on School Board and Tax Elections*, and *Research Problems in Mathematics Education*.

A National Cooperative System of Educational Data.—An intelligent facing of educational problems requires, on the part of all authorities concerned—Federal, State, local, and private—adequate information on a national scale. These data are not available at the present time; serious obstacles stand in the way of making them available. During 1961 the Office studied this problem and developed the main conceptual features of a program proposal which would establish, under the leadership of the Federal Government, a national cooperative system of educational information which would employ the resources of electronic technology for storage, retrieval, and analysis of data.

Both the internal technical problems and the field relationships and processes involved were carefully thought through. Appreciable progress was also achieved in establishing rapport with the principal field agencies—school administrators and university registrars—through which raw data would be channeled and upon which national cooperation must ultimately be based. Progress was made in cooperation with the States to standardize educational information through development of publications designed to establish standard terminology for use in reporting pupil and school staff information.

MOBILIZATION OF LEADERSHIP FOR SOLVING EDUCATIONAL PROBLEMS

A third activity of the Office traditionally has been the encouragement and coordination of efforts to handle difficult educational issues which are increasing both in scope and number. In the following examples, it may be seen that the Office has strengthened the effectiveness of a variety of organizations by providing the vehicle for them to meet common problems with mutual support and understanding.

Cooperative Planning for the Educational Media.—An Educational Media Study Panel of prominent citizens appointed by the Commissioner has collected evidence on educational uses of television during the past 15 months. The findings will assist the Office in formulating a national policy for this medium.

A series of Office media conferences led to the establishment of the Educational Media Council, the first national organization encompassing all major professional and industrial groups directly concerned with educational media.

The Media Program sponsored a conference among educators and equipment manufacturers on new and emerging equipment requirements of the schools.

A conference supported under contract with the National Association of Educational Broadcasters identified the feasibility and role of State and regional networks in educational broadcasting.

Adult Literacy Education.—The Office recognized adult education for literacy as a major educational problem. In cooperation with the National Commission for Adult Literacy, it sponsored a conference to seek methods of strengthening and expanding educational provisions for the Nation's functional illiterates. The conference dealt with the responsibility and role of the public school, private and voluntary agencies and the Federal Government in fundamental and literacy education and with community approaches to the problem.

Regional Conference on Cooperation in Educational Research.—The stimulation of interstate cooperation and communication has been a key objective of the Office in promoting research programs. An example of such action was a conference of chief State school officials, their staff members and university representatives from Michigan, Illinois, Wisconsin, and Indiana. The conference, planned by the regional representative of the Commissioner of Education and attended by members of the Office staff, explored ways and means by which greater coordination of educational research programs within and between States could be realized and by which the findings of educational research could be more effectively translated into educational practice.

Encouraging developments since the conference include: organization of a Wisconsin Educational Research Council, organization of a Michigan Educational Research Council, creation of full-time positions of Research Coordinator and assistant in the Illinois State Department of Education, establishment of a Division of Research in the Indiana State Department of Education, and formulation of plans for a cooperative relationship between State departments of education and the Inter-Institutional Research Council of the Big Ten Universities (plus the University of Chicago).

Conference of State Supervisors of Mathematics.—An Office-sponsored National Conference of State Supervisors of Mathematics was held for exploration of the theme, "Strengthening the Leadership of the State Supervisor of Mathematics." The purpose of this conference was to find ways to improve the State supervisor's work in developing mathematics curriculums, strengthening inservice and preservice training, supporting research in teaching of mathematics, and in evaluating State programs in mathematics.

CONSULTATIVE SERVICE

In addition to the thousands of inquiries directed to Office specialists by organizations, institutions, Governmental agencies, and individuals, major consulting services are sought from time to time by the States.

Higher Education in South Dakota.—In 1961, the results of a survey of South Dakota's entire system of higher education were published. The survey was requested and supported by the South Dakota Legislative Research Council and public and private institutions. Each of the State institutions was visited and evaluations of facilities, students, faculties, and curriculums completed. Reports of the survey recommended not only a statewide program in higher education, but also a program for each institution.

PROGRAMS FOR SPECIAL EDUCATIONAL PROBLEMS

With increasing frequency the American people have turned to the Federal Government for assistance on issues that are beyond the scope of their other governing bodies. Some examples of assistance by the Office of Education in fiscal year 1961 follow.

Activities Relating to the Cuban Situation.—In support of the decision to provide direct assistance to the thousands of Cuban refugees who have fled the Castro regime and who are residing in this country, the Office of Education has administered a number of programs designed to facilitate adjustment of Cuban refugees in this country.

Funds have been provided to the Dade County (Florida) School System to make possible the employment of additional teachers to accommodate some 5,000 children and to engage special personnel for their instruction. Assistance has been provided to the Dade County School System in establishing adult education programs to aid Cubans in acquiring English language training and orientation in American principles.

A special program of loans to needy students has enabled 300 Cubans studying in American universities to continue their education. Additional funds already made available have enabled many students to continue or begin their college education in this country during the summer months.

Funds granted to the University of Miami have been instrumental in training Cuban lawyers and doctors in United States practices.

A project involving the study of economic problems of Cuban refugees has been supported with Federal funds.

Instruction in English.—The Office planned and gained budget support for a major attack on the deficiencies in the teaching of English. Taking guidance from the National Science Foundation

efforts in science teaching and the NDEA programs in foreign language, mathematics, and science instruction, the Office has begun planning for the support of research, conferences, and the preparation and demonstration of curriculum materials and instructional practices.

Developments Affecting Latin America.—Using the authority of title VI of the National Defense Education Act, the Commissioner declared Latin-American Spanish to be a critical language, thus making possible a program of language and area study centers, teacher training institutions in Latin-American countries, fellowships, and research, all dealing with Latin-American language and area studies.

The Organization of American States, by contract with the Commissioner of Education, has completed a study entitled *Latin-American Higher Education and Inter-American Cooperation* and made recommendations to the Commissioner. The report, made in June 1961, is now under study in the Office.

REVIEW OF FEDERAL PROGRAMS IN EDUCATION

As the Federal Government has increased the number and size of programs in education, the necessity for analysis of the effect of such programs has grown.

International Educational Activities of the Federal Government.—The Office has been seriously concerned for some time with the extent to which education is being used as an instrument of foreign policy without adequate concern for the substance of the education involved. Inasmuch as our relationships with other peoples are vitally affected by our Nation's international assistance programs, it is important that the education undergirding these programs be of the highest order. This end will be achieved only as we use the full resources of our domestic educational establishment. For this purpose, the Office has made careful analyses of various problems in this area.

Review of the National Defense Education Act of 1958.—A panel of distinguished consultants was convened to assess the effectiveness of the National Defense Education Act in accomplishing its purposes. One major conclusion reached was that the Government will have a continuing role to play in helping students to finance college study. It was recommended, therefore, that the Student Loan and Graduate Fellowship Programs be extended indefinitely, with the latter substantially enlarged, and that a program of undergraduate scholarships be started to help talented but needy students attend college.

Survey of Federal Programs in Higher Education.—During fiscal year 1961, the Office was engaged in a major study of the effect of Federal activities on institutions of higher education. This will provide for the Office an opportunity to be a genuinely constructive force

in the programing of Federal activities of concern to institutions of higher education.

Because of the scope and size of Federal programs affecting all areas of education, it has been proposed that the Office be given continuing authority to conduct studies and make recommendations concerning all activities of the Federal Government affecting education at any level.

NEW RESPONSIBILITY AND CHANGE IN THE OFFICE OF EDUCATION

An administrative agency must change to be current in its execution of responsibility. As the requirements of the American people have increased in range and size, so has the Office responsibility shifted to meet them. Examples of increase in authority and facilities are cited below:

Improvement of Office Administration Through New Authority.—Considerable thought was given to new authority which might improve the administration of the Office and needed changes were formulated. These include the authority to interchange personnel with States so that persons with special competencies can be used to their best advantage on both the Federal and State levels, to accept gifts for the Office that in no way conflict with the expressed will of Congress, to enable delegation of authority by the Commissioner, and to broaden the authority of the Office of Education to make contracts and grants for the conduct of research and demonstrations.

New Facilities for the Office of Education.—During the summer of 1961 the Office of Education moved into Federal Office Building No. 6, a new building located at 400 Maryland Avenue SW. This new building will provide not only for additional space needed by the Office, but also facilities for demonstrating the use of television as an educational medium. During the 1930's the Office of Education was actively engaged in the utilization of radio for educational purposes. The educational television operation will be an extension of that early concern for educational media, and of the operations under title VII of the National Defense Education Act.

* * * * *

As an agency's function is enlarged, it must, from time to time, reexamine its structure and mission and report to its constituents the understanding of deficiencies and suggestion for change that would provide maximum performance of current and predicted demands.

Analysis of the Role and Organization of the Office of Education.—In October of 1960, the Commissioner of Education appointed a committee to study the role proper to the Office of Education as well as the organizational structure of the Office. After completing its de-

liberations in April 1961, the Committee issued recommendations which are being carefully studied and evaluated as a part of a general review of the effectiveness of the Office of Education in meeting its responsibilities to the Government, the educational institutions, and the general public.

SECTION III

Major Activities of the Office of Education

In the preceding section examples of the kinds of service which the Office rendered in fiscal year 1961 were presented. In this section the impact of the Office on various aspects of American education and its relationship with other agencies will be indicated.

Elementary, Secondary, and Adult Education

ADMINISTRATION

State educational agencies are the administration centers of public education in the United States. While the schools are actually operated by local agencies, the States retain supervisory responsibility. In recent years, State administrative agencies have expanded their directive, supervisory, and advisory functions. The Office of Education, at the request of State agencies, has frequently given its leadership and cooperation to assist States in the formulation of policies and programs for the strengthening of these functions.

State Departments of Education

Consultants to Local School Systems.—Most local school systems in the United States are not large enough to employ on a full-time basis all the highly trained professional specialists that are needed to provide quality education programs. Since no school should be denied the services of these skilled consultants, it is imperative that each State make some provision to fill this need. States have found that the most economical as well as the most efficient means of making such services available to local school systems is to provide them through the State department of education. The average State department has, since 1955, more than doubled its staff of consultants. A substantial part of the gain has resulted from the expansion of State programs that receive no financial support from the Federal Government. In all but a few States, specialists in science, mathematics, modern foreign languages, and guidance, have been added to department staffs through provisions of the National Defense Education Act.

Fiscal year 1961 was the third year of substantial Federal aid to State educational agencies. During the year under title III of the NDEA, the Office of Education paid \$1.7 million to the States for supervisory, administrative, and other services related to the strengthening of instruction in science, mathematics, and modern foreign languages. With these funds, which the States matched dollar for dollar, State educational agencies continued to increase their leadership to the local school districts. Approximately 200 specialists in science, mathematics, and modern foreign languages accelerated their programs to improve the quality of instruction through support for higher teacher certification standards, demonstrations of effective uses of new instructional equipment and methods, production and distribution of curriculum guides, and the organization of inservice training of teachers.

Approximately 265 State guidance supervisors, about 200 of whom have been added since title V(A) of the NDEA became operative, continued to work for improved counselor-pupil ratios and for higher standards for counselor certification.

Statistical Reports and Services.—With the operational responsibility for public education vested in the States, the State education agency has taken the key role in establishing and maintaining systems for recording and assembling the statistical data needed for solving educational problems. The Office, working with State and local leaders, has long been making efforts to provide the resource materials, consultative and technical assistance, and leadership toward strengthening State and local data systems so that they might provide accurate, complete, comparable, and timely information at local, State, and national levels.

Standardization of educational terminology throughout the Nation received major attention during this year. Forty-three States and Territories were taking steps toward initial implementation or expanded use of the standard terms, items, and definitions which have been cooperatively developed.

Excellent progress was made toward production of two additional handbooks of standard terms and definitions—one in pupil accounting and one in staff accounting. While the implementation, evaluation, and ultimate revision of these basic handbooks will require continuing staff effort, some attention in the next few years can be devoted to handbooks in program and service areas.

Under title X of the National Defense Education Act, the office assisted the States in establishing record and report systems embracing standard terminology and in developing appropriate manuals and guides. Concerted efforts were devoted to encouraging the utilization of modern automatic data processing.

Title X provides that States, on the basis of approved State plans may receive up to \$50,000 in Federal funds to be matched equally with State funds. In fiscal year 1961, there were 53 approved plans under section 1009, title X. Fund requests totaling \$1,278,658.97 were received from 46 States. Thirteen States requested the full \$50,000 of Federal matching funds and several of these will overmatch the Federal funds. For the fiscal year 1962, it is estimated that at least 50 States will request Federal funds in an estimated total amount of \$1,550,000.

The grants available, along with the Office of Education staff efforts, have provided during this fiscal year a sorely needed stimulus toward the development of modern programs of educational information.

Local School Board Effectiveness

Increase of citizen interest in improving the schools has placed responsibilities on local boards of education, unparalleled in the history of public education. Plans and programs to assist boards of education in functioning more effectively received widespread attention in 1961. State school board associations expanded their program to include inservice training specially designed for new board members. They published handbooks, manuals, and periodicals; maintained close relationships with State legislatures; and organized workshops.

During the fiscal year the Office virtually completed a nationwide survey of local school board organization, operating procedures, and characteristics of board members. This study, the first of its kind in more than a decade, is presented by size of district enrollment and geographical region, and will provide information to school board members and other citizens seeking information about board organization and practices. Variations in practices and trends will be analyzed and described.

School Problems in Metropolitan Areas

The trend toward concentration of the Nation's population in a relatively few centers has continued over the past 10 years. The 1960 census reported that over one-half of the population resides in some 209 metropolitan areas. The bulk of the increase has been in the areas surrounding the central cities, with suburban school districts frequently reporting five-fold enrollment increases in the last 10 years. In large city school districts school enrollments have also continued to mount, often while the population of the city itself was declining. Growth of the population in the suburbs, coupled with heavy popu-

lation shifts within the city proper, has created severe problems for long-range planning.

The problems facing cities are numerous and critical. The limited funds available for the construction and operation of the schools, the competition with more attractive suburbs for staff, and the constant mobility and shift of population within the city present deterrents to educational progress. But perhaps the problem of first importance is the general change in characteristics of the student population within our larger cities. The migration to metropolitan areas of large numbers of low-income families has created large student population segments whose members are severely handicapped in their ability to adjust to an urban community. Of particular concern are those students who lack proper background in basic skills and the motivation necessary to profit from a comprehensive school program.

Some of the metropolitan areas continue to provide leadership to educational progress throughout the Nation. The Higher Horizons Project of the New York City School Board and its Case Study Units in the Bureau of Attendance exemplify the use of curriculum adjustment, professional noninstructional services, and school-agency coordination efforts to improve education for the low-income, culturally disadvantaged student.

Looking toward a coordinated effort to benefit such students with programs of real significance, representatives from all national social agencies and from 38 States convened May 24-26, 1961, in Washington for the Conference on Unemployed Out-of-School Youth in Urban Areas. Dr. James B. Conant, chairman of the conference, referred to the thousands of out-of-school and unemployed youth in the large cities as "social dynamite." Others who addressed or supported the conference were Vice President Lyndon B. Johnson, Secretary of Labor Arthur J. Goldberg, Attorney General Robert F. Kennedy, and Secretary of Health, Education, and Welfare Abraham Ribicoff.

In an endeavor to find solutions to this problem, the Office of Education has encouraged the collaboration of specialists from various fields to formulate out-of-school programs of guidance and counseling for these youth. The Office has also sponsored informal meetings of representatives of national organizations of pupil personnel service professions and educational administration organizations. A national commission to conduct studies of the functions, organization, and practices of inschool pupil personnel services and to carry on experimental research in these areas is being considered.

Not least of the problems facing large city schools is that of maintaining a close relationship between patrons and schools. The relatively high mobility rate of our present society has had adverse implications for the traditional "neighborhood school." The sheer

increase in the size of our school districts, both urban and suburban, is acting to increase the distance between the school and its community. Many citizens to whom the schools have historically looked for support and leadership have moved to the suburbs. The need to identify, attract, and develop new sources of community support and leadership among citizens who have superseded the schools' former patrons is well recognized. The Office of Education is initiating a study of methods by which schools in depressed areas of large cities are organizing activities which will encourage lay participation in the growth of the school program.

STAFFING

The growth of school enrollments has continued to pose a problem of staffing the public schools with sufficient numbers of well-qualified teachers. In the fall of 1960 there were 1,410,000 full- and part-time classroom teachers in the public schools: 861,000 in elementary schools and 549,000 in secondary schools. The public schools have been able for several years to meet their current needs for increased staff without an increase in the number of emergency teachers, but a chronic backlog of between 90,000 and 100,000 teachers with sub-standard State teaching certificates has existed for a number of years. Other "hidden shortages" are to be found in the continued existence of schools on double shifts and schools with curtailed programs and services.

The postwar increase in birthrates is now being felt in the secondary schools, and the greatest needs for increased staff are now found at that level. At the same time there is a lack of balance between the number of secondary school teachers being trained in various subjects and specialties and the number needed in each field.

These and other problems in connection with staffing the public schools were reviewed in the report, *Ten-year Aims in Education: Staffing and Constructing Public Elementary and Secondary Schools*. This report, which had the benefit of review by technical and substantive experts of national prominence, outlines a program for the improvement of public school teaching staffs through increases in teachers' salaries and through improvement of selection for teacher education and preservice and inservice education.

The report suggests a staffing program over the next decade, with a goal for providing a professionally qualified and competent teacher in each classroom of the Nation's public elementary and secondary schools. To achieve this goal, the report recommends (a) staff salaries that are competitive with those in other occupations requiring equivalent training and experience, and (b) an improvement of procedures for the selection of teachers. The report further recom-

mends that programs of preservice and inservice education for teachers be increased.

In order to attain the levels of teachers' salaries recommended for the next 10 years, average salaries by 1963-64 will have to increase 50 percent in purchasing power over average salaries of 1958-59, and those salaries must then be further increased approximately 2 percent yearly over the next 5 years in order to maintain the established salary status.

The challenge of the second part of this goal—improvement of teacher selection procedures—is not chiefly a financial one (although the report assumes it will require an average of \$100 million a year over the 10-year period), but it is rather a challenge directed toward the educational profession for mobilizing resources and for expanding cooperative action at the occupational level. Public concern must also be developed if this part of the goal is to be achieved.

During the year, the Office issued a detailed study, entitled *The Beginning Teacher: Status and Career Orientations*. This study showed some of the professional, social, and economic characteristics of beginning teachers, and related these factors to differences in career plans, job satisfactions and occupational values. Viewpoints and goals of men and women beginning teachers were often found to be different, but neither group tended to look upon classroom teaching as a lifelong career. Many women, of course, expected to leave teaching either temporarily or permanently because of family responsibilities, but large numbers of men also expected to leave, either for nonteaching positions in education or for noneducational positions.

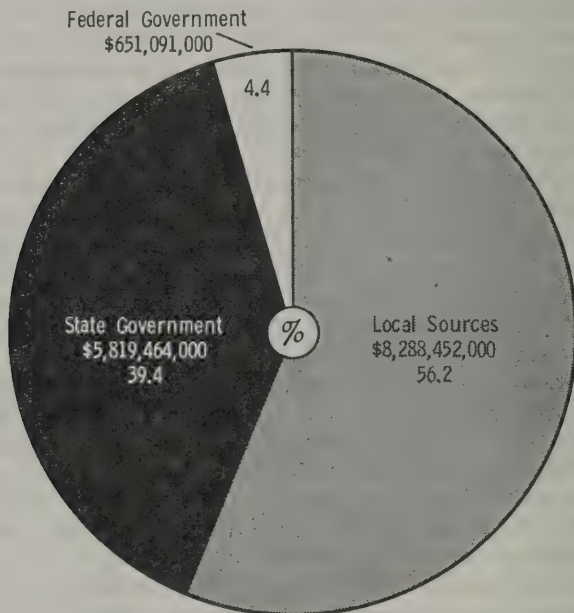
A follow-up study of this same group showed that only 68 percent were still teaching in the same school district the following year, and that 14 percent had left educational positions altogether. This latter group included 12 percent of the men and 15 percent of the women.

The conditions revealed by this study emphasize the need to achieve the goals stated above.

FINANCING PUBLIC EDUCATION

Revenues for public school purposes have increased 20.6 percent in the past 2 years, but this must not be construed to mean that the increase has been available for improvement of school services. General price levels rose an average of about 2 percent and consumed a portion of the increase in school revenue. Enrollment in the public schools increased more than 7 percent in the 2-year period and this accounted for absorption of an additional portion of the increased funds. Over and above these two factors, however, it appears that a

Chart I.—REVENUE RECEIPTS FOR PUBLIC ELEMENTARY AND SECONDARY SCHOOLS, BY SOURCES: 50 STATES AND THE DISTRICT OF COLUMBIA, 1959-60



Total Revenue Receipts: \$14,759,007,000

The proportions of revenue receipts from these sources have remained relatively constant in recent years.

net gain has been made in revenues for improving public school services. This gain was approximately 5 percent per year for the period.

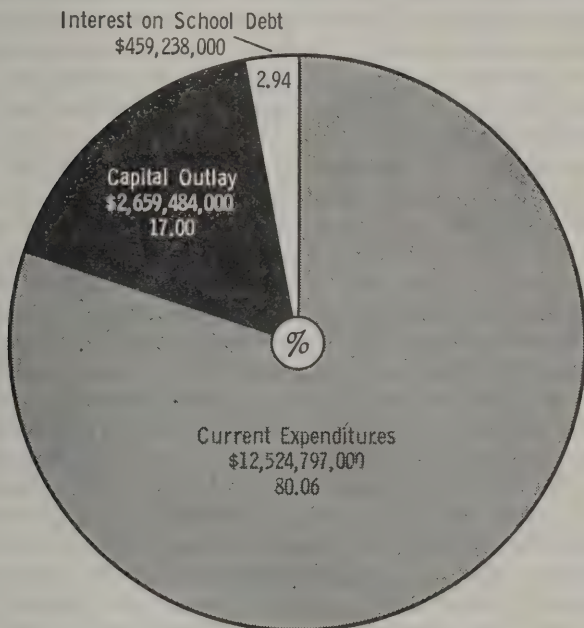
For the 1959-60 school year 56.2 percent of the school revenue was derived from local and intermediate district taxation, 39.4 percent from State sources, and 4.4 percent from Federal appropriations. These proportions which have remained relatively constant in recent years are shown on chart I. Chart II indicates portions of expenditures for the current school program, for capital outlay, and for interest on school debt which was incurred in the provision of school facilities.

Sources and problems of school revenue and school expenditures are discussed in the following paragraphs, beginning with the source of greatest revenue—local jurisdictions.

Local School Revenue

Somewhat more than half the school funds are provided from local taxes levied usually by the local boards of education. These are often

Chart II.—SUMMARY OF EXPENDITURES FOR PUBLIC ELEMENTARY AND SECONDARY SCHOOLS: 50 STATES AND THE DISTRICT OF COLUMBIA, 1959-60



Total Expenditures: \$15,643,519,000

Total expenditures for public school education increased in 1959-60 approximately 15 percent over those of 1957-58. Current expenditures were up approximately 20 percent over the same 2-year period; interest on school debt rose nearly 34 percent during the 2-year period; but, for the first time during the postwar period, capital outlay declined. Despite a continuing need for additional instruction rooms and school plants, this expenditure decreased nearly 7 percent in the 2 years ending in 1959-60.

discussed in terms of property taxes and nonproperty taxes for schools.

Property Taxes.—Public funds obtained within the school district or received from county or intermediate district taxes are derived chiefly from the property tax. Effective tax rates on property have been rising during the 1950's, and the school property tax rate increase has been two and one half times as great as that for other local government services. The importance of the property tax as a revenue producer has been maintained, and property taxes have more than doubled from 1950 to 1960, despite acknowledged inequalities and other weaknesses of this tax in our present complex economy.

A study by the Office of Education indicated that revenue requirements of the public elementary and secondary schools in the decade

ahead will rise faster than revenue can be expected from property taxes. Property tax revenue generally increases more slowly than gross national product. With the property tax as the main revenue source for schools, general price level increases—and particularly rises in the teacher salary level required to maintain the competitive position of schools in a growing economy—are likely to lead to continued fiscal crises for the schools.

Nonproperty Taxes.—Proceeds of nonproperty taxes for schools such as local taxes on amusements, deed transfers, hotel occupancy, motor vehicles, sales, wages, and various business transactions, have increased only slightly in recent years. Pennsylvania remains the only State in which local school districts derive significant amounts from these sources. They now produce about 20 percent of local taxes for schools in that State. A number of other States have authorized the use of some limited types of nonproperty taxes for schools but these have produced relatively small amounts of school revenue.

In school districts for which the local legislative authority, other than a school board, allots funds for school operation from general revenue, some broadening of the local tax base is evident through the additional nonproperty tax sources available to these governments.

School Debt.—School facilities are financed very largely through the issuance of bonds. For assistance to local boards of education in the issuance of school bonds and the management of debt service, the Office of Education is reporting monthly and annually in *School Life* the average net interest costs on new school bond sales for each State and for the Nation. These reports supply boards of education with information of great significance on problems of offering bonds for sale, accepting or rejecting bids, and levying taxes required for debt service. According to the Moody ratings, the average net interest cost declined steadily from 3.94 to 3.42 percent during the 21-month period ending in June 1961.

Nevertheless the total expenditure for debt service is a rapidly expanding item in school budgets. It includes amounts required for repayment of loans as well as for the payment of interest. Receipts from the sale of bonds are designated as nonrevenue receipts. School bond sales reached a peak of \$2.420 billion in 1957–58, declined 20 percent in 1958–59, but came within 2.5 percent of the peak in 1960–61 when sales totaled \$2.360 billion.

Bonded debt for public school purposes has risen from less than \$5 billion in 1950 to more than \$15 billion in 1961. The annual sale of school bonds has increased from \$1.87 billion to \$2.36 billion over the 5-year period ending in 1960–61. The total amount of school bond sales for that period was \$10.8 billion.

Debt service expenditures have risen from less than \$.5 billion in 1949-50 to nearly \$2 billion in 1960-61. While bonded debt was increasing about 200 percent, debt service expenditures were increasing about 300 percent. This is due partly to the fact that interest rates have increased from under 2.50 percent to approximately 3.50 percent. Another reason for this disproportionate increase in debt service may be the substantial increase in the sale of shorter term bonds in recent years. In 1954-55 the average net interest cost on school bonds was 2.32 compared to 3.91 in 1959-60. The average rate in 1960-61 has declined to 3.52 percent.

State Funds for Schools

Since 1947-48, school revenue from State sources has amounted to approximately 40 percent of total revenue collections for schools. Between 1957-58 and 1959-60 State funds increased 20.4 percent. This increase was very similar to the 20.6 percent increase in total revenue for public schools during the same period. It indicates that the States have kept the same pace of increase that has occurred overall.

Increased appropriations of State money have been provided not only for general improvements in education, but also for improvements for special school purposes. A current example of this latter use of State funds relates to the improvement of mathematics, science, and modern foreign language instruction, promoted under the National Defense Education Act, which provides that Federal funds be matched by State funds for the same purpose.

Sources of tax income for the programs of State support generally include individual and corporate income taxes, sales taxes, death and gift taxes, taxes on natural resources, and motor vehicle licenses. However, these taxes are usually adopted by the States for the general support of all governmental services rather than the support of specific areas of service such as education. As much as 75 percent of the State funds for schools are from State taxes collected for this kind of general support. The remaining 25 percent of the funds are from taxes earmarked for schools by constitutional or legislative mandate.

Federal Funds for Schools

Federal support of education in State and local school systems increased 31.3 percent from the 1957-58 to the 1959-60 school year. Although the proportion of total school funds provided by Federal appropriations has remained relatively constant (approximately 4 percent), the scope and variety of Federal programs have been greatly expanded in the last decade. In addition to support of education through State and local school systems, Federal agencies

provide funds through fellowship, traineeship, training grant, and research grant and contract programs. These programs recognize the Nation's school system as the basic institution for the development of manpower resources to meet national defense and other needs.

Programs of the National Science Foundation and the U.S. Office of Education provide significant support for teacher training, facilities for improved instruction, and studies in improving the content of courses. The National Defense Education Act of 1958 is providing assistance to State and local school systems, institutions of higher education, and to individuals to achieve its purposes. Other Federal programs provide support for school lunches, for agricultural research and extension services, for instruction in land-grant colleges, for the education and training of veterans, and for many other purposes.

Expenditure Patterns

Raising the standards of educational services wanted by the general public can be achieved through increases in expenditures, but modifications in expenditure patterns also offer opportunities for improvement. School superintendents and boards of education are constantly making decisions on apportioning funds among items of the school budget, decisions on reductions or eliminations when revenue is reduced, and decisions on adjustments to be made when additional funds are available. Those having responsibilities for making these decisions are aware that more effective budgeting is extremely important in raising the standards of school services.

Studies are being made of the relationship of the cost of instruction per pupil and the teacher-pupil ratio; also average daily attendance and the teacher-pupil ratio. These studies may help in the determination of relationships between expenditure patterns and the quality of educational services.

FACILITIES FOR PUBLIC EDUCATION

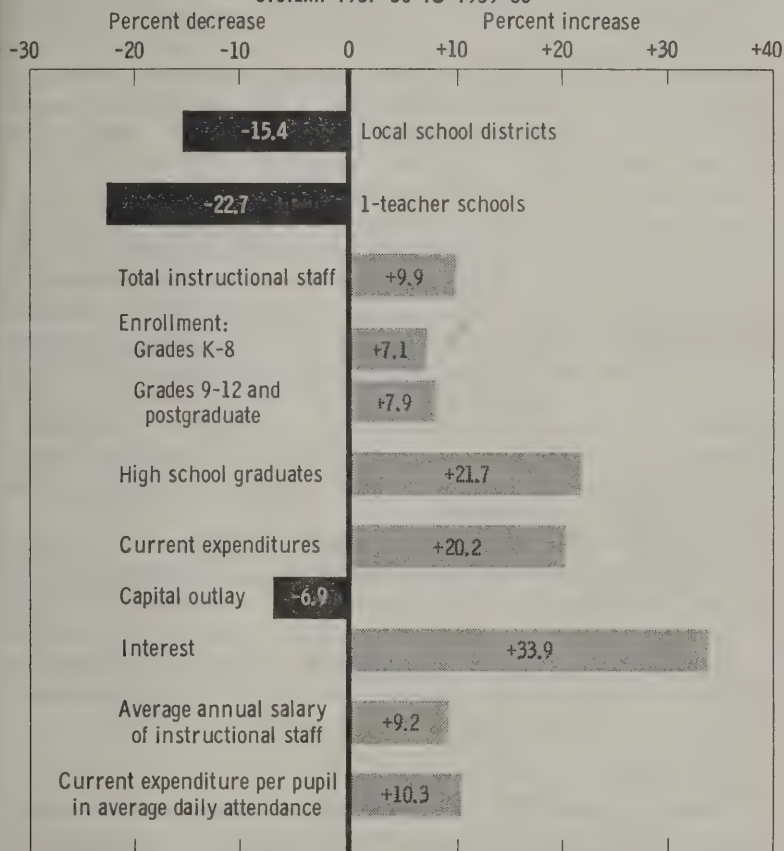
Needs

In the fall of 1960, there were 36,305,000 pupils enrolled in the Nation's public elementary and secondary schools in the 50 States and the District of Columbia. Of this number, 1,868,000, or 5.1 percent of the total enrollment, were in excess of the normal capacity of the accessible publicly owned school plants in use. This number represented an increase of 122,000 pupils over 1959 figures.

Not only were the pupils in excess of normal capacity affected by the shortage of classrooms, but also their classmates. The Office of Education estimated that approximately 8 million pupils were affected by overcrowding, by half-day sessions, and by the use of improvised

or makeshift facilities. An estimated 2 million others were housed in obsolete or otherwise inadequate buildings. The total number of pupils, therefore, whose education was impaired in varying degrees by the classroom shortage is estimated to be at least 10 million.

Chart III.—CHANGES WITHIN THE PUBLIC ELEMENTARY AND SECONDARY SCHOOL SYSTEM: 1957-58 TO 1959-60



Source: U.S. Department of Health, Education, and Welfare, Office of Education. *School Life*, September 1961.

Most of the increases represented below are either desirable or expected. The high percentage increase in interest payments reflects the large amounts borrowed in recent years for school construction. The decreases in the number of local school districts and 1-teacher schools are the result of reorganization and consolidation of small and nonoperating districts. Although the number of 1-teacher schools decreased 6,000 during the 2-year period ending in 1959-60, there were still 20,000 such schools in operation, or about 22 percent of all elementary schools. The decline in capital outlay (money used for sites, buildings, and new equipment) was the first in the postwar period, and developed in spite of the well-known lag in construction of school facilities.

The accumulated shortage of instruction rooms (classrooms, laboratories, and shops) for the 5 years ending in 1959-60 remains high despite the fact that 343,000 were completed during that period. Although 69,600 rooms were scheduled for completion in 1960-61, only a small part of this total can be applied against the reduction of the backlog of 142,200 additional instruction rooms (reported by the States in the fall of 1960) needed to house adequately the pupils who were located in overcrowded or otherwise unsatisfactory facilities. This is due to the fact that thousands of rooms were needed in the fall of 1961 merely to provide for population shifts, the estimated annual enrollment increase of more than a million pupils, and for replacements of rooms abandoned during the year.

Enrollments in public elementary and secondary schools will increase from 36 to 44 million during the decade 1959-60 to 1969-70. New facilities will be needed to accommodate these new students. In addition, hundreds of existing school plants will need to be remodeled and expanded. Current developments in new processes of teaching and learning—teaching machines, educational television, language laboratories, and new concepts of individual, small group, and large group instruction—make it imperative that these new and remodeled facilities be planned, constructed, and equipped to accommodate anticipated educational programs. In order to meet these needs, careful attention will have to be given to designing facilities that are adaptable to a variety of uses.

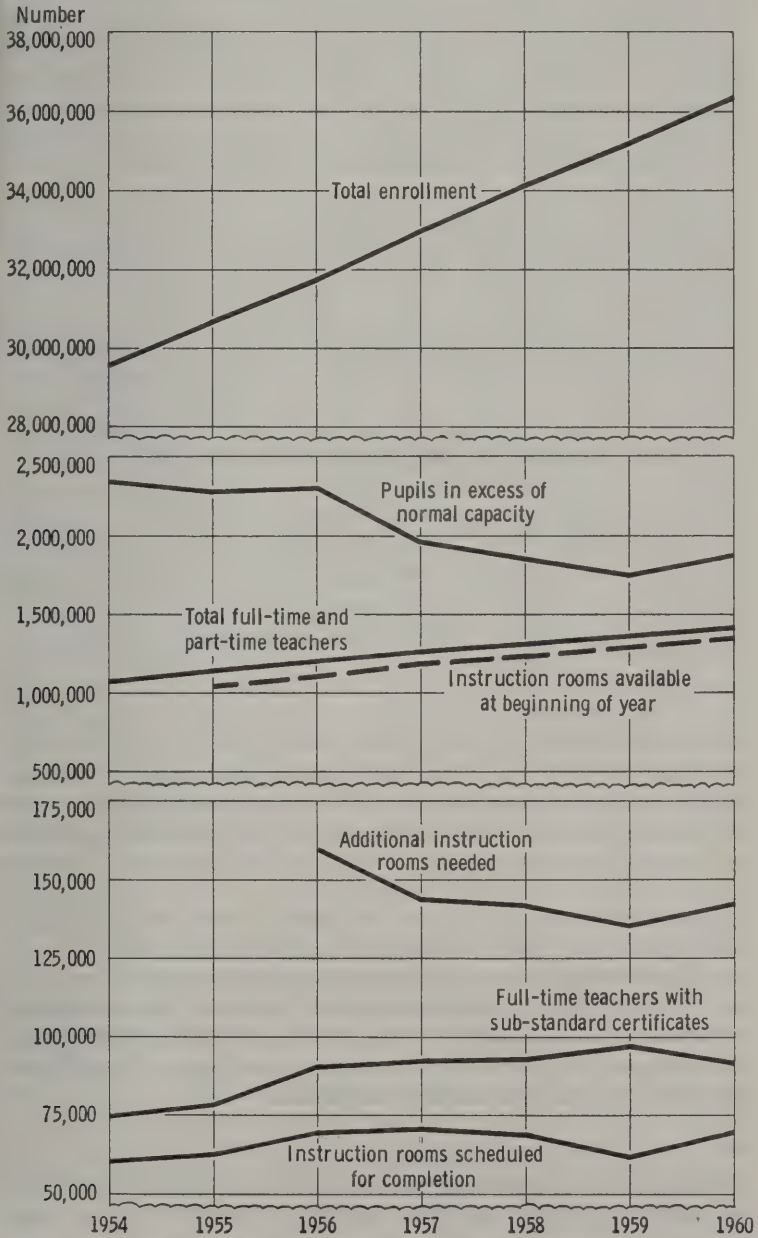
The magnitude of the task of planning, designing, and providing instructional facilities for educational programs is compounded by steadily increasing costs of construction and equipment. To compensate for these rising costs, school plant planners will need to keep abreast of economical developments. The Office of Education will share information on technical advances with State departments of education, and through them, with local systems.

Federal Funds for Facilities

Under Public Law 815.—From the end of World War II to the beginning of fiscal year 1961, the American people spent approximately

This chart shows the trends in a number of key areas of elementary and secondary education. A steady increase of more than 1 million students per year is evident. Until 1959 there was a slight decline in the "number of pupils in excess of normal capacity" roughly paralleling the general decline in "number of additional instruction rooms needed"; figures for 1960 show an increase over 1959. As would be expected, "total full- and part-time teachers" parallels and is only slightly more than the "number of instruction rooms available at beginning of year." The "number of instruction rooms scheduled for completion" has not varied from year to year more than about 8,000—the approximate 1960 increase over the previous year. The "number of teachers with substandard certificates" steadily increased from 1954 to 1959; but in 1960 the number decreased.

Chart IV.—TRENDS IN ENROLLMENT, TEACHERS, AND SCHOOLHOUSING IN FULL-TIME ELEMENTARY AND SECONDARY DAY SCHOOLS, 50 STATES AND THE DISTRICT OF COLUMBIA: FALL 1954 TO FALL 1960



Source: U.S. Department of Health, Education, and Welfare, Office of Education. Fall 1960 Statistics on Enrollment, Teachers, and Schoolhousing.

\$28 billion for public elementary and secondary school buildings. Of this amount, the Federal Government, under provisions of Public Law 815, contributed more than \$948 million.

Under the NDEA.—The Office of Education, through its authorization to administer funds appropriated by Congress under the National Defense Education Act, has assisted many school systems in improving facilities and purchasing equipment that should improve the quality of education in instructional areas designated by the Act. For example, from 1959 to 1961, NDEA funds under title III were used to remodel 7,000 classrooms to accommodate laboratory and other equipment essential for quality instruction in science, mathematics, and modern foreign languages. During 1960, approximately 56,000 projects for the purchase of materials and equipment costing \$105 million were approved. Fiscal year 1961 ended with evidence that projects were approved in even more impressive numbers and at greater costs than those approved in 1960. The tendency among the States participating in title III funds of the NDEA is to spend approximately 75 percent of these funds on science facilities and equipment, about 8 percent on equipment and facilities for improved instruction in mathematics, and about 17 percent on foreign language laboratory facilities. School authorities have increased the number of foreign language laboratory systems from 64 in 1958 to more than 2,500 at the beginning of fiscal year 1961. In addition to these laboratory systems, many schools have acquired audiovisual equipment such as tape recorders and projectors for their language programs.

CURRICULUM

Experimental Programs

The curriculum of the public schools is being increasingly influenced by technological developments which involve the use of new communications media within the classroom. Where these media are used as supplementary aids by a teacher, they offer much promise. Only in instances where the course would not be otherwise available is it considered advisable to use the filmed course, the TV course, or the teaching machine as a substitute for a teacher.

Many educators feel that great care must be exercised in developing the content of and in programming filmed courses, TV courses, and courses for use in teaching machines, lest they lead to an undesirable uniformity of the curriculum or to an undesirable type of curriculum control by nonschool and commercial sources.

English

During the past year individuals and groups called attention to the need for improvement in the teaching of English. In a signifi-

cant report, titled *The National Interest and the Teaching of English*, a committee of the National Council of Teachers of English stated that the teaching of English is not as effective as it should be and that the task of the English teacher is becoming increasingly difficult. The committee also called attention to the inadequate preparation of at least half of the persons now teaching English. To improve the teaching of English, the committee declared that, with the help of the Federal Government, "bold and immediate action must be undertaken on a national scale."

Instruction in reading is a major concern of teachers of English. As the first step in a long-range project to improve the teaching of reading, the Office of Education began collecting data on research in reading completed between 1955 and 1960. From these data professional bulletins on various aspects of reading will be published to illustrate how sound research findings may be used to improve classroom instruction.

In conjunction with selected high school and college teachers, the Commission on English of the College Entrance Examination Board is developing and trying out sample curriculums and instructional materials, grades 9-12, for college-bound students. Through summer institutes at colleges and universities, the Commission on English plans to upgrade the qualifications of English teachers.

One of the primary concerns of English teachers is composition instruction. More writing assignments, especially during class time, were made possible in some places by a lighter teaching load and the hiring of lay readers to correct and evaluate themes. Articulation of high school and college composition programs was improved through State and regional conferences of high school and college English instructors. Office of Education concern with the teaching of English has been reported in an earlier section of this report.

Youth Fitness

On February 21, 1961, the Secretary of Health, Education, and Welfare, serving as Chairman of the President's Council on Youth Fitness, called a meeting of national leaders in various fields related to youth fitness for the purpose of studying recommendations for using Federal resources more effectively on fitness programs throughout the Nation. This meeting was addressed by the President, the Attorney General, and other Cabinet officers. A Consultant to the President on Youth Fitness was appointed at this meeting.

During the year a guide, *Youth Physical Fitness, Suggested Elements of a School-Centered Program*, was prepared. This pub-

lication emphasizes the importance of health appraisals and the identification of the physically underdeveloped pupil and gives many practical suggestions for tests and activities. Conferences also were held with the State, city, and county directors of health and physical education.

Science

One of the most significant developments in science education during the past year was the expansion of the efforts of various national curriculum study groups. Two separate groups, supported financially by the National Science Foundation, have developed new courses in chemistry. The Chemical Bond Approach project, introduced experimentally in certain schools in 1959, has continued to furnish revised materials; and curriculum materials developed by the Chemical Education Materials Study was introduced into some schools in 1960. Experimental work in revising high school biology has been directed by the Biological Science Curriculum Study. The National Science Foundation has given financial assistance to hundreds of summer and inservice institutes for science and mathematics teachers.

Three conferences, sponsored by the American Association for the Advancement of Science and supported financially by the National Science Foundation, were held to determine the feasibility of upgrading science instruction in grades K-9. These conferences sought ways of measuring the achievements of senior high school students who had studied various science courses, recent developments in the psychology of learning, and the problem of introducing major improvements in science teaching into the elementary and junior high school.

The Office of Education science staff has launched a program through which local school personnel, State supervisors, and Office of Education specialists work cooperatively to improve teaching in local schools. This program referred to as STEPS (Science Teaching-Exploration for Excellence—Program Steps) includes suggestions for evaluating and strengthening the school science program. The program emphasizes the formation of advisory committees of local persons with science backgrounds, the use of facilities provided through the National Defense Education Act, enlisting the cooperation of teachers in sharing with other teachers the new information they have gained while attending institutes, and the use of physical resources of the community. Pilot projects are underway in half a dozen States, and approximately 20 additional State supervisors of science are interested in the program.

Mathematics

Mathematics received major emphasis in elementary schools during the past year. Experimental centers throughout the country, sponsored by the Federal Government and by private foundations or grants, reflected this increased attention to the structure and meaning of mathematics. Institutes held throughout the country for elementary teachers and educational leaders in mathematics provided training in a variety of new developments in the teaching of mathematics.

In the area of secondary education, there was increased emphasis on the structure and meaning of school mathematics. Recent activities in improving secondary school mathematics include the work of the School Mathematics Study Group (SMSG). The SMSG, which is financed by the National Science Foundation, had previously made textbooks and teachers manuals available for use in the experimental programs in mathematics, grades 7-12. During the past year, SMSG prepared instructional materials for grades 4-6 which have been tried in selected experimental centers, as were instructional materials designed for slow achievers in grade 9.

The mathematics programs of SMSG and other groups are currently being evaluated by the Minnesota National Laboratory at the University of Minnesota. Educational Testing Service is also working with SMSG in evaluating the new mathematics materials. Although SMSG is the largest experimental program ever undertaken in mathematics, there are many other significant experimental programs being carried on at a number of institutions of higher education. A number of eminent psychologists are engaged in studying patterns of concept formations.

The Office of Education, in cooperation with the National Council of Teachers of Mathematics, sponsored a national conference on inservice education programs, held March 17-19, 1960, in Washington, D.C. The conference report, *Inservice Education of High School Mathematics Teachers*, was published by the Office during the year.

State departments of education have been active in improving inservice education at the local level. To assist in this effort, the Office of Education sponsored the National Conference of State Supervisors of Mathematics held in Washington, D.C., June 19-23, 1961.

Foreign Languages

As of July 1961, 53 State supervisors or consultants in foreign languages were functioning in 38 States and the District of Columbia. All but six of these posts were created between 1958 and 1960. In August 1960, a 2-week Research-Study Conference, attended by rep-

representatives from the States, was sponsored by the Office of Education to discuss problems of State-level supervision of instruction in modern foreign languages. One significant outcome of the conference was the establishment of the National Council of State Supervisors of Foreign Languages. Stimulated by the experiences and recommendations of the Research-Study Conference, the supervisors have played a strong leadership role for the improvement of foreign language instruction in their individual States.

The NDEA Summer Language Institutes for elementary and secondary school teachers have retrained an increasing number of language teachers, as have inservice training courses in local areas. Many colleges and universities have also offered special summer programs and a few have already revised their regular teacher-training programs to meet the changing pattern of foreign language study. All of this, in turn, has begun to stimulate research in the foreign language field.

Vocational Education

Area Vocational Education Programs.—Vocational education programs for the training of highly skilled technicians under title VIII of the National Defense Education Act are making a significant impact. In fiscal year 1961 all of the 50 States, the District of Columbia, and Puerto Rico conducted programs designed to alleviate the technical manpower shortage. An increased number of State legislatures provided needed funds to accelerate this type of training. State technical institutes and area schools were constructed in a number of States to make training available to more students.

Under title VIII approximately 300,000 students have benefited from technical training programs during the past 3 years. Preparatory curriculums, generally 2 years in length, in broad fields of technology included: electronics, mechanics, electricity, chemistry, aeronautics, production, instrumentation, and data processing. Electronic technology programs accounted for approximately 40 percent of the total enrollment. About two-thirds of all preparatory enrollments were at the post high school level.

Extension courses provided training for adults already engaged in technical occupations to improve their technical knowledge and skills for advancement in their occupations or for upgrading into new or more difficult jobs.

Curriculum guides in mechanical, chemical, and data processing technologies are being prepared by the Office of Education. These follow the pattern of the curriculum guides in electronic and electrical technologies previously published by the Office and distributed to the States.

Seven regional conferences, attended by over 400 State and local personnel from 48 States and the District of Columbia, were conducted to develop ways and means of achieving quality in the basic elements of technical education programs.

Advisory committees and consultants assisted State and local vocational educators with curriculum design and many other phases of program development. The Bureau of Employment Security cooperated with the States in screening prospective students for technician training programs. States gave attention to the development of graduate follow-up procedures and some schools reported 100-percent placement of their first graduates.

Trade and Industrial Education.—Trade and industrial education continued to contribute through preparatory and extension programs in over 200 occupational fields to the needs of youth, as well as to the skilled manpower requirements of the Nation. States reported an expansion of trade and industrial education especially for out-of-school youth and for adults, and particularly in new area vocational schools. Enrollment gains occurred in cooperative work training programs and other occupational fields, especially the service trades and health occupations. A majority of all vocational education enrollments occurred in the fields of trade and industrial education.

Enrollments in practical nurse training continued to grow. Progress was made in curriculum development, several States reporting workshops in this area. Research in nursing education was carried on through cooperative action with other Federal agencies and national associations concerned with the health occupations.

Several Office programs have contributed to the manpower needs of industry. Emphasis on training of the unemployed as well as the underemployed resulted in a readiness to expand facilities to meet these growing problems. Enrollments in supervisory training virtually doubled in the past 5 years. Enrollment of apprentices, reflecting results of the joint efforts of education, labor, and management, gained substantially.

Expanded course offerings and technological change have placed heavy demands on curriculum development. Several States established curriculum laboratories, indicating an awareness for expanding and updating their instructional materials.

Needs for improving skills in vocational education were studied. Differences in the requisites of full- and part-time instructors have brought about changes in teacher training programs in many sections. A number of State-initiated leadership development conferences, as part of long-range plans to meet State and local needs for administrators and supervisors, were held during the year.

Distributive Education.—The Office of Education distributive education program provides instruction in marketing and distribution. It emphasizes economic concepts and judgment skills that apply not only to occupations but also to functions in marketing. Its instructional materials encourage career development from beginning jobs to management and business ownership.

All the trainees in distributive education are employed or have definite promise of employment in the field. At the high school level, entry jobs assist the trainee in learning how to become a productive employee, in studying marketing functions within a business and a community, and provide opportunity for the instructor to analyse individual potentials and career objectives of trainees.

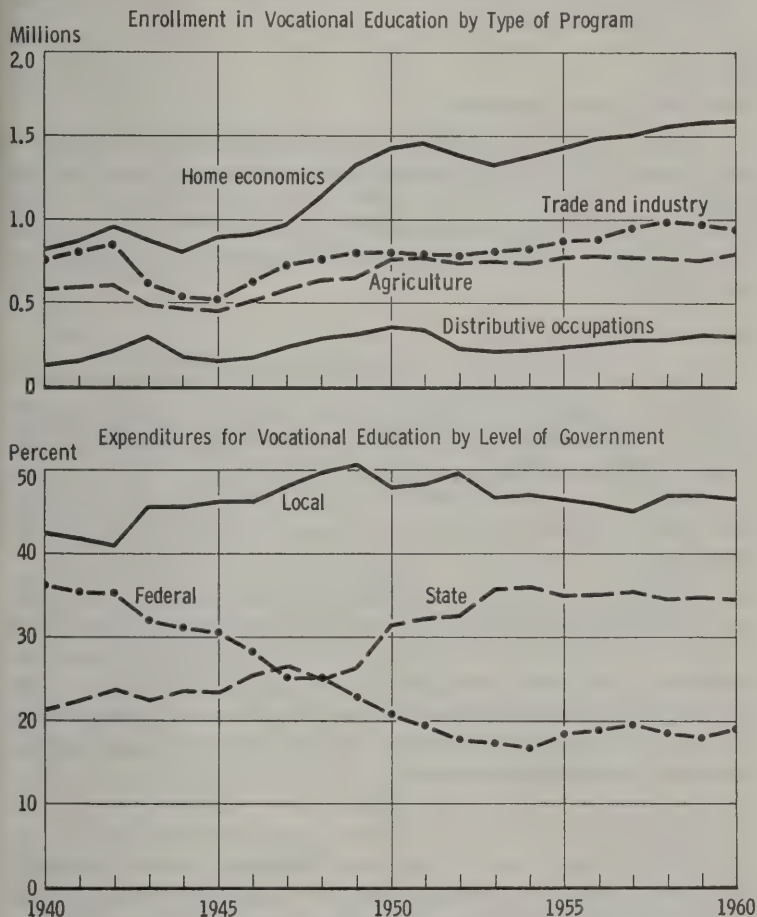
In their endeavor to assist individuals who plan careers in distribution, States and communities used evaluative criteria to establish quality standards of instruction and program operation, emphasized research to recognize economic developments significant in curriculum and learning activities, and strengthened curriculums and expanded opportunities for preparatory inservice teacher education.

Most of the enrollments in distributive education are in adult extension courses which stress small business management and the marketing of locally important products. Distributive education has gained recognition with management and labor groups and trade and business organizations as a vehicle through which training and retraining programs may be offered successfully.

Office Education.—The office-education program continued its efforts to encourage and promote education for office careers. This program services the second largest employment classification in the Nation (clerical and kindred workers), representing about 15 percent of the total number in all types of employment. Material of interest to office educators was widely distributed through Office of Education releases, professional journals and speeches.

Home Economics.—The Office of Education is concerned with the extension and improvement of public school programs of home economics for young people and adults, of research in home economics education, and of home economics teacher education programs. In carrying out these activities during 1960–61, extensive use was made of the findings from a study of home economics in public secondary schools made by the Office in the spring of 1959. Data from the study have given direction on evaluation and revision of curriculums at State and national levels. Reports of the findings were given and implications for action considered at (a) three regional home economics education conferences organized by the Office of Education,

Chart V.—VOCATIONAL EDUCATION ENROLLMENTS AND EXPENDITURES: 1940–60



Source: U.S. Department of Health, Education, and Welfare. *Health, Education, and Welfare Trends*, 1961.

In 1960 there were 3.8 million students enrolled in vocational education courses. Of these students, approximately 42 percent took courses in home economics, 21 percent in agriculture, 25 percent in trade and industry, and 8 percent in marketing. The remaining 4 percent were some 101,000 students who took courses in science, mathematics, and other related courses under Area Vocational Education Programs, and 40,000 who took courses in practical nursing. In 1960, of the approximate \$239 million expended for vocational education programs, State and local funds furnished 81 percent.

(b) State meetings of teachers and administrators, and (c) meetings of professional organizations.

STUDENTS

Public High School Graduates

In 1959-60, there were 1,764,237 pupils enrolled in the last year of high school of whom 92.2 percent were graduated. These 1,627,060 graduates represented 68.7 percent of the class which had entered grade 9 in 1956-57—an increase of 8.3 percentage points over the rate of graduation in 1949-50 as compared with enrollments in grade 9 four years earlier.

Identifying Talent

The National Defense Education Act under title V(A) grants funds to States to improve and extend their guidance, counseling, and testing services. Reports from the States indicate that the NDEA program has been effective in helping many students who were planning to drop out of high school or not planning to go to college, set their goals, plan their careers, and take advantage of educational opportunities.

Most States have adopted a counselor-pupil ratio of 1 to 300 as their goal. In 1958, the national ratio for all high schools was 1 to 750; at the present it has dropped to below 1 to 600. Over 7,000 new counselors have been added since the beginning of the NDEA. Current statistics indicate that there is a shortage of approximately 20,000 guidance and counseling personnel at the secondary school level, and 2,200 at the undergraduate college level.

Exceptional Children

Exceptional children include those who are blind or partially seeing, deaf or hard of hearing, those who have impaired speech, who are crippled, who have special health problems, who are socially maladjusted, emotionally disturbed, mentally retarded, or who have above-average talent. These children now number approximately 6 million, only about one-fourth of whom are receiving the specialized education they need.

One index of the increasing public understanding and acceptance of special means of education for exceptional children and youth is shown in data from a forthcoming statistical report of the Office of Education. Percentage gains in enrollments for the decade 1948-1958 are shown below:

Area of exceptionality	Percentage gain in enrollment
LOCAL PUBLIC SCHOOLS:	
Blind	441
Partially seeing	11
Deaf	81
Hard of hearing	25
Speech impaired	167
Crippled and special health problems	14
Socially and emotionally maladjusted	84
Mentally retarded	152
Gifted	153
RESIDENTIAL SCHOOLS:	
Blind	32
Deaf	22
Socially and emotionally maladjusted	63
Mentally retarded	31

Likewise, the number of localities or operating units in which programs were carried on grew from about 1,500 in 1948 to nearly 3,700 in 1958. The increase was more than the total number of localities in 1948.

Adequate preparation of teachers is probably the major key to quality education. In 1953 only about 120 colleges offered a minimum sequence of preparation in one or more areas of exceptionality. A study is now underway to ascertain the current status of teacher preparation programs in these areas.

There is much interest in curriculum development at the graduate and undergraduate college levels. This interest was accelerated by a nationwide series of studies conducted by the Office of Education on teacher competencies in the various areas of special education.

When the Congress passed Public Law 85-926, a large forward step was taken toward the expanding of opportunities and programs, particularly at the graduate level, for the preparation of teachers of the mentally retarded. This law provides for the establishment of a fellowship program for preparation of (1) instructors and directors of college or university programs for the training of teachers of the mentally retarded, or (2) supervisors and directors of educational programs for mentally retarded children in State and local school systems. About 170 fellowships have been available each year.

During fiscal 1961 the Office of Education issued three publications in the area of the gifted student: a bulletin entitled *Teachers of Children Who are Gifted*, a report on a Cooperative Research Program project, entitled *The Gifted Student*, and a study entitled *Educating the More Able Children in Grades Four, Five and Six*.

Dropouts

The average age for graduation from high school is about 18 years. The average age of the high school dropout is 16+ years. High school graduates, based on enrollments 4 years before their graduation, have been increasing steadily since 1948 (from 62 percent in that year to approximately 67 percent in 1960). But larger enrollments have actually increased the number of dropouts. Employment problems for these dropouts are further complicated by the growing number of aging workers who frequently compete with young workers for the same marginal jobs.

Although some talented students and many with average ability are among dropouts, the majority are slow learners and pupils from homes of low-level education and culture. Pupils from these groups lack motivation to continue in school, but through the encouragement which is being provided by expanded guidance and counseling programs under title V(A) of the National Defense Education Act, many of the talented and those with average ability complete their high school education and enter college, and a great number of those with below-average ability are led to continue their training in courses adapted to their capabilities.

Three general approaches to a solution of the drop-out problem are currently being tried out in school systems:

1. Attempts to raise the cultural level of children who are culturally deprived.
2. Better teaching with emphasis on acquiring basic skills in the elementary grades and junior high school with remedial instruction provided for slow learners.
3. School-work program where pupils spend one-half day in school and one-half day on a school supervised job.

ADULT EDUCATION

The concerns of adult education relate to some of the major problems of our time. These problems involve the training and retraining of adults to meet the challenge of scientific and technological developments; the growing educational needs of older people; and the provision of educational opportunities for undereducated and uneducated American adults.

During fiscal 1961 emphasis was on the development of more qualified adult education leadership in the States. Office of Education staff members provided assistance in strengthening adult education programs and services of State departments of education, universities and colleges, public schools, libraries, and voluntary citizen organizations. The National Conference on Aging held in 1950 and the one

held in 1961 included sections on education. From these conferences has come a clear delineation of the role of education for the aging.

The Office of Education, in cooperation with committee members, prepared the supporting document, "Background Paper on Education for Aging," used by the education section of the 1961 White House Conference on Aging. Office staff members also contributed the education section of a final conference report entitled "The Nation and Its Older People," as well as a final conference report on "Education for Aging."

In cooperation with the National Commission for Adult Literacy, the Office called a national conference on June 1-2, 1961, for the purpose of studying ways and means of increasing and expanding educational opportunities for foreign-born and native adult citizens.

An Office of Education bulletin released in 1961 entitled *Education of the Adult Migrant* analyzed the difficulty of absorbing migrants from farms and small villages in urban areas. This study will assist urban communities interested in providing special educational opportunities for new residents.

Civil Defense Education

The Civil Defense Adult Education Program was designed to teach the techniques of individual, family, and community survival in disasters, both manmade and natural. This educational program is conducted by instructors who have completed 15 hours of technical studies, and is offered to adults in a 12-hour course, through the public school systems. The course includes the study of defensive measures against radiological, chemical, and biological warfare, community planning for such emergencies, and protective measures against natural disasters.

Instruction in Civil Defense.—Under contract with the Office, the States of California, Florida, Kentucky, Louisiana, Minnesota, Nebraska, and Texas prepared instructors to teach these courses. Eight more States have contracted to participate in the program during 1962.

Higher Education

INSTITUTIONAL NEEDS

General Needs of All Institutions

Of the 2,028 institutions of higher education listed in the Office's *Education Directory, Part III, Higher Education, 1960-61*, 1,325 operate under private or denominational control, and 703 under public control. A substantial share of the Office's effort during fiscal 1961

was devoted to providing services to these institutions, their officials, their boards of control, and to governmental agencies, denominations, and other organizations. A survey of the colleges and universities of South Dakota (7 public, 9 private), conducted at the request of a committee of the State legislature with the full cooperation of the private colleges, was the largest single effort of this kind. In addition to providing consultive and professional services to scores of institutions, and to their duly constituted officials, the Office conducted comprehensive surveys of approximately a dozen individual colleges and universities in as many States.

During fiscal year 1961, the problems of these institutions continued to relate primarily to the steady rise of enrollment and the prospect of a sharp upturn of the rate of rise between 1964 and 1969. The Office completed, and on January 19, 1961 the Secretary of Health, Education, and Welfare released a staff paper entitled *Ten-Year Objectives in Education: Higher Education Staffing and Physical Facilities*, which sketched in detail the requirements of the Nation's colleges and universities for professional staff and physical facilities.

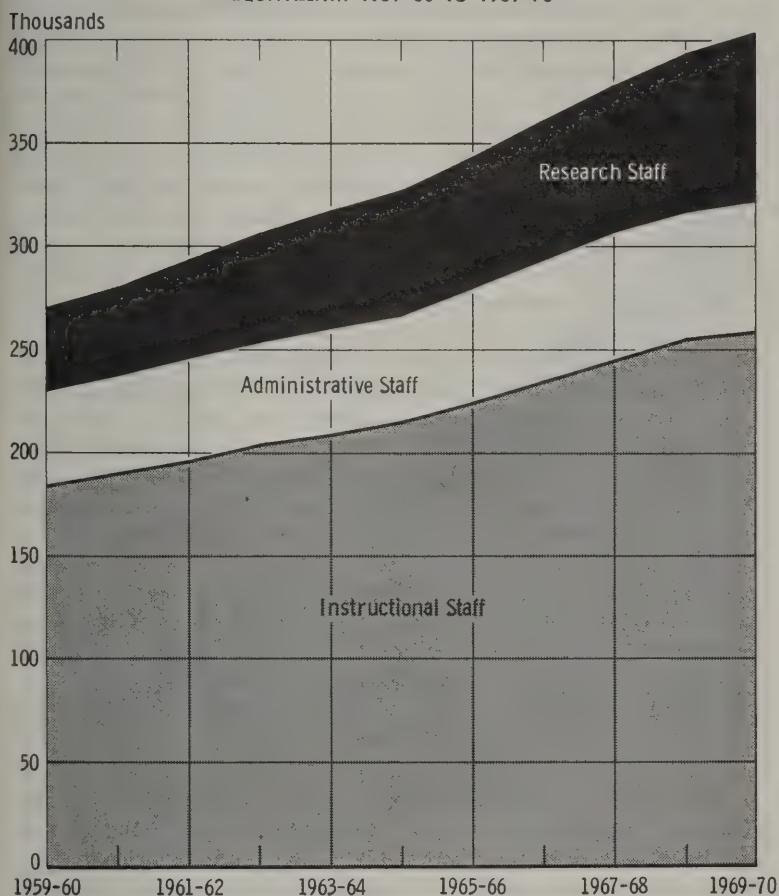
The Office gave increasing attention to the needs of and trends in graduate education, completing the following studies: *Graduate Education in Business Administration*, *Graduate Degrees Awarded by Members of the Association of Graduate Schools*, *Bibliography on Graduate Education*, and *Graduate Fellowships and Capacities of Graduate Schools*.

Several special studies designed to assist those responsible for higher education administration and planning were in progress or completed during fiscal 1961. Among them were *Advance Planning for Higher Education*, *Internal Organization and Administration of Colleges and Universities*, and *Cooperative Projects Among Colleges and Universities*. The Office also compiled and published a comprehensive bibliography on *The Administration of Higher Education*.

Higher Education Staffing Needs.—The prospective shortage of professional staff is one of the two most serious problems facing higher education. Today about 383,000 professional persons (about 298,000 full-time equivalent) are engaged in providing the teaching, research, management, and administrative services in higher education.

During the next 10 years about 336,000 new, trained professional staff members must be recruited by the Nation's colleges and universities (at the master's and doctor's degree levels) to replace those lost by death, retirement, and resignation and to accommodate increases in enrollment (see chart VI). The Nation's graduate schools must train not only these persons but similarly the far larger numbers of people required for business, industry, Government, and other areas. In order to keep pace with mounting enrollments, these schools must

Chart VI.—PROJECTED HIGHER EDUCATION PROFESSIONAL STAFF TOTALS (FULL-TIME EQUIVALENT): 1959-60 TO 1969-70



Source: U.S. Department of Health, Education, and Welfare, Office of Education. *Ten-Year Objectives in Education: Higher Education Staffing and Physical Facilities, 1960-61 Through 1969-70.*

The chart indicates the number of full-time persons required to meet the projected demands for instructional and administrative services and for the growing program of organized research. Of the total staff of 402,000 required in 1970, approximately 64 percent will be engaged in teaching; 16 percent in administrative services; and about 20 percent in organized research.

produce persons on the doctorate level at a greatly increased rate in order to avert serious deterioration in the level of academic training.

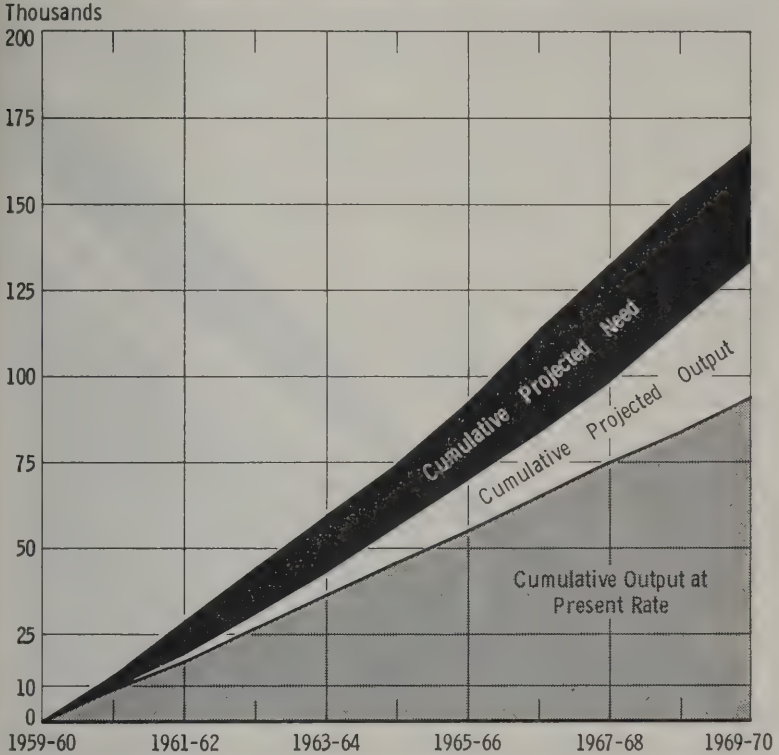
The Office led in developing during fiscal 1961 a pilot project for encouraging competent youth to prepare for careers in college teaching. Fifty colleges in Wisconsin are cooperating with the University of Wisconsin and Marquette University in the project, in which 150 top sophomore students participated in a workshop on college teaching as a career, and in which plans for university-supervised paid internships coordinated with graduate study are planned.

The percentage of doctor's degree holders among entering staff members in institutions of higher education declined from 31.4 percent in 1953-54 to 23.8 percent in 1958-59. It was estimated that to establish the proportion at 30 percent for the decade 1960 to 1970, the Nation's graduate schools would have to award an average of 16,800 doctor's degrees annually during that period. When this number is compared with the current rate of about 9,800, and a projected 10-year average of 13,300 based on present increasing graduate enrollments (see chart VII), the staffing crisis is clear. Even the goal of 16,800 new doctor's degree holders per year will be insufficient unless improved balance between supply and need by fields is achieved, and unless at least 60 percent of those receiving the doctor's degree accept positions in higher education. During the year the Office investigated staffing problems of colleges and universities in surveys of faculty turnover, faculty load, staffing in selected subject fields, and studies of career characteristics and motivation.

Higher Education Salary Problems.—The problem of recruitment of staff for higher education will become increasingly serious, at both master's and doctor's degree levels, unless salaries in colleges and universities are increased during the next decade at an unprecedented rate. The increases in salary of professional staff in higher education during the last 5 years fall far short of restoring the economic ground lost by the profession since 1940. The Office's report, *Higher Education Planning and Management Data, 1959-60*, completed and published during fiscal 1961, provides data for use in evaluating the status of instructional and administrative salaries in the Nation's colleges and universities.

Higher Education Facilities Needs.—The Secretary's staff paper, *Ten-Year Objectives in Education*, previously referred to, indicates that the colleges and universities need to spend \$9 billion for facilities by 1965 and an additional \$10 billion by 1970 to accommodate the anticipated rise in enrollment and to replace outmoded or obsolescent facilities. Projections of presently anticipated income indicate that even with full utilization of the Federal Government's College Housing Program funds at the rate of \$250 million a year, the funds

Chart VII.—CUMULATIVE OUTPUT OF AND NEED FOR DOCTOR'S DEGREES FOR HIGHER EDUCATION STAFFING: 1959-60 TO 1969-70



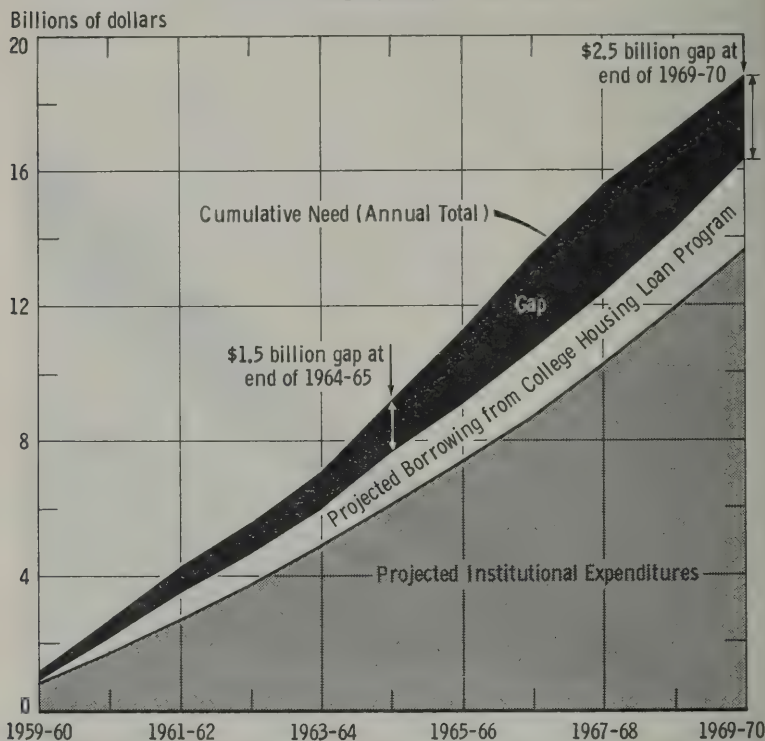
Source: U.S. Department of Health, Education, and Welfare, Office of Education. *Ten-year Objectives in Education: Higher Education Staffing and Physical Facilities, 1960-61 Through 1969-70.*

Projection of cumulative need is based on two assumptions: (1) that 30 percent of new staff members should hold the doctorate in order to insure quality, and (2) that 60 percent of all doctor's degree recipients can be counted upon to fill such positions. The comparisons of projected need with estimated cumulative output during the decade ending in 1970 identifies the "quality gap" (a shortage of approximately 35,000) threatening higher education if the output of doctorates is not both accelerated and increased.

for facilities will fall short of needed expenditures by \$1.5 billion by 1965 and \$2.5 billion by 1970 (see chart VIII). During fiscal 1961 the Office completed and published part 3 of its College and University Facilities Survey: *Inventory of College and University Physical Facilities, December 31, 1957: A Preliminary Report.*

In continuing the effort to provide information on the support of higher education, the Office planned or initiated surveys in college and university endowment investment and facilities needs.

Chart VIII.—CUMULATIVE NEED IN HIGHER EDUCATION FOR PHYSICAL PLANT: 1959–60 TO 1969–70



Source: U.S. Department of Health, Education, and Welfare, Office of Education. *Ten-year Objectives in Education: Higher Education Staffing and Physical Facilities, 1960-61 Through 1969-70.*

These projections take into account the following factors: (1) enrollment increases, (2) condition of plant—obsolescence and substandard conditions, (3) instructional facilities, (4) residential facilities, (5) construction costs, (6) cost of additional, special needs. Note that the size of the gaps projected for 1965 and 1970 would be approximately doubled if College Housing Loan Program funds were not available.

Trends in 2-Year Institutions

The importance of 2-year colleges (community or junior colleges and technical institutes) to higher education is seen by the steady increase in the number of such institutions over the last 10 years as well as by the fact that an increasing number of these institutions are being operated under public control.

Several important developments on the 2-year college scene occurred during fiscal 1961. In many States new laws affecting 2-year colleges were passed in the 1960-61 sessions: Missouri and Kansas provided

State financial aid for 2-year colleges for the first time; Michigan, Colorado, and Maryland passed laws strengthening and clarifying the legal structure of 2-year colleges; and Ohio passed laws enabling different types of public 2-year colleges to be established. These and other legislative developments affecting 2-year and other colleges are cited in the Office's annual summary: *State Legislation Relating to Higher Education*. In addition, the Office published during fiscal 1961, a definitive report bearing on the 2-year college movement: *Criteria for the Establishment of 2-year Colleges*.

Trends in Professional Education

The Office gave attention during fiscal 1961 to trends in engineering, and in technical, agricultural, and professional education. Among the related studies completed during the year were: *Trends in Engineering Education*, *Organized Occupational Curriculums, 1958 and 1959*, *The 3-2 Plan of Engineering Education*, *Transfer Students in Engineering*, and *College Enrollments and Degrees in Agriculture*. Several titles were added to the series, "New Dimensions in Higher Education": No. 8, *Advanced Standing*; No. 9, *Reappraisal of the Credit System*; and No. 10, *Quality in the Undergraduate College*. The Office also identified for priority treatment and drew plans to attack the problem of improving the quality of teacher education.

STUDENT FINANCIAL NEEDS

Non-Federal Assistance

During fiscal 1961, the Office completed and prepared for final reporting a comprehensive study of institutional undergraduate student financial assistance for the academic year 1959-60.

Scholarships from non-Federal sources constitute the largest single block of student assistance, estimated by leaders in the field at between two-thirds to three-fourths of the total volume of scholarship assistance. In the following tabulation the total value of institutional scholarships for 1959-60 and other related statistics are compared with the data of 4 and 10 years earlier:

	1949-50	1955-56	1959-60
Number of higher institutions that awarded scholarships---	1, 198	1, 341	1, 559
Total value of institutional scholarships-----	\$27, 000, 963	\$65, 736, 950	\$98, 157, 498
Number of students awarded scholarships-----	124, 223	237, 370	288, 521
Average institutional scholarship grant-----	\$217	\$277	\$340

Another student financial assistance project of the Office of Education, nearing completion at the close of fiscal 1961, was a study of State administered and financed scholarship programs. This study deals with: (a) scholarships authorized by State legislation and supported by specific appropriations, which are not a part of institutional scholarship assistance; and (b) programs of State administrative agencies (such as education, health, highways, and welfare), which enable students to attend a college or university with an option of repaying the agency either in money or in service.

Based upon data for the fiscal year 1958-59, the study reveals that 33 States, the District of Columbia, and Puerto Rico operated 104 scholarship grant programs which assisted 55,178 students with a total volume of scholarship awards of \$19.5 million at an average grant of \$355 per student. The programs of the States of California, Florida, Illinois, Maryland, New York, and Virginia account for the scholarship assistance to approximately four-fifths of all State-aided scholars and a corresponding portion of State scholarship expenditures.

In recent years several States, including Georgia, New Jersey, Rhode Island, and Virginia, have adopted general (nongategorical) scholarship programs. Moreover, California has amended its legislation to enlarge its general competitive scholarship program and has authorized a new scholarship program for agricultural students.

Another substantial volume of scholarship assistance is awarded by a variety of business firms, corporations, labor unions, churches, civic organizations, parent-teacher associations, women's clubs, and other voluntary organizations. It is estimated that for the year 1959-60, approximately 37,000 scholarship grants with a total stipend value of about \$22.5 million were awarded.

The largest segment of these scholarships is administered by the National Merit Scholarship Corporation. During 1959-60 this program provided scholarship aid to 830 first-year college students, who were awarded an average grant of \$827, for a total of \$686,150. The total scholarship payments to these students and to those of 3 previous years was almost \$2.2 million and was in support of 3,937 students.

Increases in Tuition and Required Fees.—An important consideration of student financial assistance is the adequacy of stipends to meet college costs, which have been sharply increasing since 1954. During fiscal year 1961 the Office continued its study of this trend. A comparison of the average annual institutional charges for tuition and required fees in 196 representative colleges and universities between academic years 1949-50 and 1960-61 is given below:¹

¹ Figures are for 196 representative institutions for which continuous data for the period indicated were available. These colleges and universities, each of which enrolled more than 1,000 full-time undergraduate students, accounted for approximately 55 percent of the Nation's undergraduate students and for a larger proportion of graduate students. These data apply, therefore, to the majority of college students.

Academic Year	Tuition and Fees	Increase since 1949-50	
		Amount	Percent
PUBLIC INSTITUTIONS			
1960-61-----	\$207	\$95	85
1959-60-----	194	82	75
1958-59-----	179	67	60
1957-58-----	168	56	50
1956-57-----	155	43	38
1955-56-----	147	35	31
1954-55-----	135	23	21
1949-50-----	112	-----	-----
PRIVATE INSTITUTIONS			
1960-61-----	\$938	\$473	102
1959-60-----	890	425	91
1958-59-----	820	365	76
1957-58-----	741	276	59
1956-57-----	690	225	48
1955-56-----	638	173	37
1954-55-----	590	125	27
1949-50-----	465	-----	-----

During the 11-year period, public colleges and universities increased their tuition fees by \$95, or 85 percent, while private institutions increased theirs \$473, or 102 percent. While the average scholarship grant during the last 4 years increased by \$63 (from \$277 to \$340), during the same period the average increase in tuition fees increased \$242, or almost four times as much.

A conservative estimate of the total volume of non-federal undergraduate scholarship assistance from all sources for the next academic year (1961-62) would be \$150 million. In view of recent increases in tuition charges and other college costs and the number of high school graduates who have the requisite ability for higher education, it is doubtful that this sum is adequate to overcome the economic barriers to higher education.

Federal Assistance

During 1961, the Office's higher education programs under titles II, IV, V(B), and VI of the National Defense Education Act reached peak operation.

Title II.—During fiscal 1961, 156,000 students borrowed \$73.3 million. Loans totaling \$108,360 were made to 390 Cuban students in 51 institutions in the United States.

Title IV.—1,500 fellowships were awarded and 476 new and expanded graduate programs were supported during fiscal year 1961. Support of these projects, together with the continuing support of approximately 2,500 fellowships awarded in the previous 2 years, amounted to \$6 million during the year. A total of \$12.6 million

was appropriated for the graduate fellowship program for fiscal year 1961, approximately 50 percent of which was paid in grants to fellows and 50 percent in stipends to institutions conducting the graduate programs.

Title V(B).—A total of 2,744 counselors and teachers preparing to become counselors attended 83 summer institutes, and 612 attended 20 regular-session institutes. The experience of 2 years of NDEA guidance counselor training institutes led in 1961 to the following new approaches. To meet the demand of providing well-trained guidance counselors and better guidance programs, the Office improved the institutes by (a) placing greater emphasis on year-long training for regular enrollees, and (b) setting up short-term special-purpose institutes to provide an opportunity for persons who needed refresher training in new techniques, and for those who have not yet met certification requirements.

At the suggestion of the Office of Education, the Association of Secondary School and College Administration Officers secured a grant that enabled the Association to send representatives from college admissions offices to the institutes conducted during the summer of 1960. These representatives were able to present the most current information on problems of college selection and admission.

Special purpose institutes of 2 to 8 weeks' duration will be established in 1962 to train counselors in handling new guidance problems. Concentration will be on problems associated with the increased number of students aspiring to attend college—the wide ability range of these persons, the student's choice of college and admission to college. These institutes will also stress the role of the counselor in developing and changing the school curriculum.

Recognizing the necessity that the school administrator must understand and support the guidance program of a school, provision will be made at some of the special institutes in the summer of 1962 for a 1- or 2-day visitation by school administrators.

Finally, a new program of full-year traineeships was proposed so that advanced training could be provided promising counselors and counselor supervisors.

Title VI.—2,003 elementary and secondary school language teachers attended 37 summer institutes, and 117 attended 5 regular-session language institutes. Language fellowship awards were made to 472 graduate students studying 31 neglected languages. This included 112 renewals of fellowships awarded the previous year.

A total of 46 language centers at 30 colleges and universities received support amounting to \$1,575,000 for improving and strengthening instruction in 44 neglected languages.

A total of 46 new language research projects were initiated at a total cost of \$811,416, and another \$1,118,205 was obligated to continue the 115 projects begun in the 2 preceding years.

Improvement of Auditing Procedure for NDEA Funds.—The Office of Education has continued to improve its recently established program of auditing the expenditure of funds received under the National Defense Education Act by colleges and universities. This auditing program provides professional assistance and advice to institutions which have received NDEA funds, in the establishment of adequate financial systems to assure accountability for Federal funds.

International Education

INTERNATIONAL EDUCATION AND THE NATIONAL CHALLENGE

In earlier days the resources of an undeveloped country lay in the vast uncultivated land. These resources, in turn, demanded and produced capital wealth. But today, the need is for trained manpower, which can be produced only through education. Indeed, there is a growing belief that man himself is the only permanent form of wealth, that societies become technically advanced, politically secure, and economically developed through the education and training of individuals.

This idea of education as the foundation of economic, social, political, and cultural development, is a logical outgrowth of American tradition. But what was once regarded as an abstract right of the individual is now understood to be the foundation of national power, essential for national survival.

Perverting this great concept to the uses of communism, Russia is using education as a political tool on the one hand, for creating "the new communist man," and on the other, for building the power needed to support communism at home and abroad.

Today this concept of education is of vital concern to mankind. Whether education is fostered by a nation as a means of teaching broad freedom of thought and action, thereby insuring self-government for its citizens, or is promulgated as an agency for suppressing those freedoms, thereby supporting totalitarian control over its subjects, is the choice many peoples of the world are now making or will make in the years immediately ahead. Since 1946 more than 800 million people have begun to govern themselves. In many new nations, only a small proportion of the children are in school. Their parents are generally convinced that only through education can they achieve a decent way of life. In some countries more than 40 percent of the government's income is devoted to education.

The Office has served as a bridge between educational developments at home and overseas since it was established in 1867. In 1896 this role was formalized by legislation which gave the Commissioner of Education basically the same reporting responsibilities toward both foreign and domestic education. As education has increased in importance as an instrument of both national and international policy, the responsibilities of the Office in international education have grown rapidly. Likewise, it has become apparent that the Office should take the leadership in convening representatives from Government, industry, and education to discuss the adequacy of present programs of education at all levels to meet the manpower needs for the Nation's international activities, and to educate our people for the international responsibilities of the future.

INTERNATIONAL EDUCATIONAL RELATIONS

During 1960-61 the Office performed a variety of services for governmental and nongovernmental agencies, professional organizations, and institutions and individuals both here and abroad.

Services Relating to International Organizations

The Office provided information on education in the United States to international organizations, ministries of education, and institutions and professional educators abroad.

Among many projects undertaken were the evaluation of UNESCO's proposed education program for 1961-62 and the development of project plans for inclusion in the organization's program for 1963-64. An adviser from the Office of Education was appointed to the United States delegation to UNESCO's General Conference in Paris. The Under Secretary of the Department of Health, Education, and Welfare was official spokesman for education on the delegation.

Work with the International Bureau of Education included, in addition to the usual multilingual progress report on education in the United States, the development of official replies to questionnaires on the one-teacher school and on preprimary education. These questionnaires were the basis of discussions at the Twenty-fourth International Conference on Public Education in July 1961. The Office reprinted and distributed the recommendations adopted by the conference, and in various publications described its proceedings and significance.

Upon request, the Office furnished the names of specialists in various branches of education and nominated persons for membership on international boards or committees of experts to such organizations as UNESCO, the United Nations, and ILO. The Office was

also asked to recommend persons for awards of international fellowships in education.

Major reports prepared by Office specialists for inclusion in UNESCO publications included material on correspondence education and the teaching of geography, and a report on the accessibility of the teaching profession to women.

Credentials Evaluation

During 1961 comparative education specialists of the Office evaluated 5,355 credentials for university admissions offices, boards of certification and licensure, State Departments of Education, and other institutions and agencies. This was an increase of 918 cases over 1960. Staff members continued to work closely with the American Association of Collegiate Registrars and Admissions Officers, the Council on Evaluation of Foreign Student Credentials, the National Association of Foreign Student Advisers, and the Institute of International Education on matters relating to credentials. The Office participated in conferences and meetings of these associations, in the development of materials, and in the dissemination of current information helpful in interpreting education programs of institutions abroad. These activities are essential in improving and expanding American support of education in the new nations.

Conferences and Studies on Comparative Education

In the summer of 1960 a conference was held on education in Communist China, at which several papers prepared by specialists in the field were presented and discussed, and later published. Government specialists with particular knowledge of Soviet education were recently invited by the Office to present papers on themes related to their common field of interest. These papers will be published during the coming year.

A brief study, *Education in England*, developed for an earlier conference, and an account of a 1960 conference, *Foreign Understanding and Interpretation of United States Education*, were published during 1961.

Among comparative education studies published in 1961 for the use of United States educators and specialists were *Education for Africans in Tanganyika*, *Soviet Education Programs*, and *Educational Trends in the Caribbean*. Other publications appearing during the year deal with aspects of education in Afghanistan, Libya, the United Arab Republic, Czechoslovakia, Rumania, the U.S.S.R., Switzerland, Communist China, Indonesia, Hong Kong, and the United Kingdom.

These publications will promote understanding and comparison of programs and enable government and professional agencies to develop more effective educational aid to other countries. The studies have a special significance to American institutions accepting foreign students, and others whose widely divergent educational backgrounds and professional competencies need careful appraisal in order to place them in circumstances that will yield maximum value from their American experience.

Clearinghouse of Educational Studies

During the year the Educational Clearinghouse completed 122 statistical reports of the activities of approximately 8,000 exchange students, teachers, and other scholars on Government-sponsored programs who were engaged in more than 200 fields of specialization. The following fields of study attracted the largest number of foreign grantees in the order indicated: medicine, elementary education, economics, government, law, journalism, American literature and civilization, English as a second language, physics, and chemistry. American grantees, who went abroad to study during the same period, came from all States and Territories and pursued their studies in more than 60 different countries. These grantees engaged in some 150 specialized fields of study, among which the following, in order, attracted the greatest numbers: Romance languages and literature, music, English as a second language, English language and literature, Germanic language and literature, political science, elementary education, art, physics, and physical education.

Specialists for International Assignments

Education is an important area in the programs of technical assistance to the underdeveloped areas of the world. The Mutual Security Program and a somewhat similar program operated by UNESCO, together require a continuing overseas staff of approximately 900 educational technicians. The Office of Education is responsible for recruiting education specialists for both programs.

The Office also selects an increasing number of technical assistants for educational specialists overseas and, periodically, sends packets of professional educational materials to them. The Office increased its activity to provide training for Americans serving abroad in Government or private enterprises. This function of the Office of Education is illustrated by a major effort in 1961 to develop resources in the African languages through centers, advanced language fellowships, and research under title VI of the National Defense Education Act.

Language study in the land in which the language is spoken was given new emphasis in Office planning in 1961. The lack of authority

to provide such opportunities was recognized as a gap in the existing National Defense Education Act language training program, and it was proposed that this authority be added in order to improve further the preparation of language teachers.

International Educational Exchange

The Office continued to conduct three major programs under agreements with the Bureau of Educational and Cultural Affairs and the International Cooperation Administration of the Department of State: the Teacher Exchange Program, the International Teacher Development Program, and the Technical Assistance Training Program in Education. It has worked with the Conference of Governors to develop State participation in international teacher exchanges. It has also provided nonscheduled advisory services to hundreds of individuals and institutions in this country and elsewhere. In addition, it provided extensive services for visitors who were not recipients of grants administered by the Office. The total number of participants in the four categories was 2,539.

Teacher Exchange Program.—The Teacher Exchange Program expanded slightly from a total of 619 in 1960 to 624 in 1961. The participants were distributed as follows: teacher interchanges, 155 pairs (310 teachers); other United States teachers assigned abroad, 130; other foreign teachers assigned in the United States, 45; summer seminars abroad for United States teachers, 139. Eight seminars were conducted as follows: teachers of Spanish in Spain and Colombia; teachers of history in France, in Brazil, and in India; teachers of the classics in Italy; teachers of German in Germany; teachers of French in France.

International Teacher Development Program.—The International Teacher Development Program increased from 486 visiting educators in 1960 to 529 in 1961. The number of participating countries increased from 65 to 67. Programs arranged at 16 colleges and universities included four groups in the teaching of English as a second language; two groups each in elementary and secondary education; three groups in American civilization; an Irish teacher group; a Tunisian teacher group; and one group each in administration and supervision, science education, and vocational education. Individual itineraries were prepared for 12 participants at an advanced, specialized level.

Two teacher-development workshops in elementary, secondary, and vocational education were held at the University of Puerto Rico—one in October and one in February 1961—for 113 educators from South and Central America.

Technical Assistance Training Program.—The number of participants supervised during the year 1960–61 totaled 768. The trend toward emphasis on degree programs, first noted in the previous year, was again reflected in the Near East-African training projects. There was a slight decrease in the number of participants from the Far East, from 338 to 302. Countries with the largest number of representatives were Indonesia, the Philippines, Thailand, Vietnam, the United Arab Republic, Iraq, Turkey, and the Sudan. Training was arranged for educators in approximately 60 different fields of education involving 150 training centers located in almost every State, the District of Columbia, and Puerto Rico.

Secondary and Non-Grant Visitor Programs.—Secondary visitors are recipients of United States Government grants administered by agencies other than the United States Office of Education, but who are referred to the Office to pursue their interests in education. Non-grant visitors do not hold United States Government grants. They may be sponsored by their own governments, private foundations, or educational institutions, or may be traveling entirely at their own expense. The Office provides services for these visitors, ranging from single appointments to complete itineraries, including travel and hotel reservations and appointments with local sponsors in many communities. In 1961, the number of secondary and non-grant visitors reached 618, an increase of 170 over 1960 and almost double the figure for 1959.

EDUCATIONAL MATERIALS LABORATORY

The Educational Materials Laboratory is a collection of educational materials of some 11,000 items—textbooks, supplementary reading materials, curriculums, professional literature, records, films, and filmstrips—published in the United States and abroad. These resource materials are used by United States and foreign educators as well as by specialists in the Office of Education and in other Government agencies. More than 1,700 visits to the Laboratory were recorded during 1961.

The Office arranged for consultation periods, seminars, and workshops for members of the Community Development Education Section of the Philippines, representatives of the Ministry of Education of Cambodia, several administrators from Costa Rica, and more than 500 participants in programs for foreign educators.

For United States educators the Laboratory developed a program on educational materials for suburban librarians from Maryland and Virginia. A 5-day workshop was also arranged for a group of New York State teachers engaged in a project to improve teaching

in world affairs. Such activities are increasing as more States require teaching about world affairs.

Annotated listings of educational materials are published in *Educational Materials Laboratory Report*. The *Report* is issued about 10 times annually and provides current information on Laboratory holdings and recently published materials.

Library Services

LIBRARY NEEDS

The problems facing the Nation's library services fall into two groups: those related to securing recognition of the increasing needs for materials, facilities, and staff to serve our growing population and those related to the financing necessary for obtaining these services. Various aspects of these two needs, together with accomplishments in the field of library services during the past year, will be presented in the following discussion.

PUBLIC LIBRARIES

Although considerable progress has been made in the past 4 years in overall public library development, many serious deficiencies still remain. For example, there are still some 25 million Americans without direct access to local public library service. Many additional millions receive only token service. The basic components of factors necessary for adequate public library service are: trained and experienced leadership; an adequate number of professional and other library personnel; good physical facilities; book and nonbook resources in all fields and at all reading levels; and continuing and adequate financial support. The absence of any one factor affects the impact and strength of the total program. The lack of adequately trained staff is now critical.

The concentration of population in our urban areas has resulted in an increased use of the services and facilities of public libraries--particularly by the growing number of students and by research workers in specialized fields. Because of the demands for public library service to children and youth, adult library services in support of self-education beyond school years are frequently underdeveloped and understaffed. Increased library use has rarely been matched by increased financial support.

How the public library serves as an educational agency is described in a new U.S. Office of Education publication titled *The Public Library—For Lifelong Learning*. This 36-page illustrated brochure describes many specific ways in which the public libraries serve as vital community agencies of informal education and makes recom-

recommendations for improving library services in this area. However, not until recent years has the profession at large begun to accept and implement these recommendations. In order to assist the States in preparing or revising library standards including recommendations for larger units of service and interlibrary cooperation, the Office of Education published *State Standards for Public Libraries*, a compilation of State standards for public libraries together with the American Library Association standards of public library service.

The Library Services Act (Public Law 597, 84th Congress), passed in 1956 and now extended until 1966, authorizes an appropriation of \$7.5 million annually for the period of the legislation for grants to the States for the extension of public library services to rural areas without any service or with inadequate service. *State Library Extension Services: A Survey of Resources and Activities of State Library Administrative Agencies, 1955-56*, containing basic information on State library extension activities for the year prior to the passage of the Library Services Act, was published during the past year. This bulletin provides a bench mark for evaluating the effectiveness of this grant-in-aid program.

A progress report of the participating States and Territories for the first 3 years of the act was issued under the title, *State Plans Under the Library Services Act: Supplement 2*. The basic statistics of the first 4 years are impressive: more than 34 million rural people now have new or improved services; State funds for development of rural library services have increased 75 percent since 1956, and local appropriations for such services have increased 50 percent since that date: more than 6 million books and other materials have been added to the resources of rural communities; and approximately 250 new bookmobiles are now operating. In the wake of county and regional developments over 1½ million rural people have library service for the first time. State library agencies have added over 100 field consultants to their staffs. Scholarship programs under the act are now in effect in 17 States.

There is still much to be done. Fourth-year reports from the States indicate that the number-one concern is adequate State and local support; the number-one problem, the shortage of trained staff; and the number-one goal, the achievement of library service which maintains high standards in staffing and resources to meet the needs of the users. It is expected that the extension of the Library Services Act to 1966, will permit some 24¼ million people living in rural areas (as yet unserved) to participate in the benefits of this program.

SCHOOL LIBRARIES

Two significant developments in the school library field occurred in 1961. The first was the establishment of the School Library

Development Project, with a grant of \$100,000 from the Council on Library Resources to the American Library Association for a project of the American Association of School Librarians. The purpose of the study is to assist in the promotion of higher standards for school libraries through the implementation of *Standards for School Library Programs* published in 1960 by the American Library Association. The project provides financial assistance to programs for implementing the standards and consultative service and materials to organizations and groups planning programs. As of June 1961, 21 grants had been awarded to State groups for conferences, studies, and special activities for the improvement of school library service. All States have been provided with newly developed materials designed to improve leadership in school library development.

The Office of Education staff served as consultants in the development of a project which resulted in publication by the Council of Chief State School Officers of a policy statement, *Responsibilities of State Departments of Education for School Library Services*, prepared by the Study Commission of the Council. This statement supports the principle that school libraries are basic to instruction, recognizes the concept of the school library as part of an integrated center for storing and disseminating all types of instructional materials, and states principles of relationships between school and public libraries.

At the request of the American Library Association, the Office of Education is conducting a comprehensive survey of school libraries in the United States for 1960-61. This survey is collecting data on county, city, and town school library supervisory services; on centralized processing services; on school library quarters; and on methods of use of the school library—areas which are valuable in planning for school library development but which have not been previously studied.

In the past year, four State departments of education have for the first time included the position of State school library supervisor in their budgets. Twenty-four State departments of education now employ one or more school library supervisors.

COLLEGE AND UNIVERSITY LIBRARIES

In 1959-60, academic libraries spent approximately \$136 million to serve students and faculty in 1,951 institutions of higher education. This expenditure represented an average of approximately 3 percent of the estimated total expenditures for educational and general purposes in these institutions. Most academic libraries, however, were hard-pressed to furnish library materials and staff services for adequate instructional and research programs.

A comparison of present conditions with the proposed standards promulgated by the American Library Association reveals the following facts. While minimum standards for libraries in 4-year institutions specify 50,000 well-selected volumes, a staff of three full-time professional librarians with adequate clerical help, and a budget amounting to 5 percent of total institutional expenditures for educational and general purposes. The libraries in 55 percent of the 4-year institutions have fewer than 50,000 volumes; 52 percent have fewer than the recommended three full-time professional librarians; and only 3 percent of total institutional expenditures were spent for library purposes.

The minimum standards for libraries in 2-year institutions specify a collection of 20,000 well-selected volumes, a staff of two full-time professional librarians, and the same 5-percent budget specified for 4-year institutions. The libraries of 87 percent of the 2-year colleges have fewer than 20,000 volumes, and 78 percent fall short of the number of librarians recommended.

Academic libraries as a group would have to receive an additional \$90 million for materials and professional staffing to reach the recommended level of 5 percent of total institutional expenditures for educational and general purposes.

Only 3 percent of total institutional expenditures were spent for library purposes.

While academic libraries currently receive inadequate support, their problems will be magnified during the next 10 years when enrollments in institutions of higher education are expected to rise from 3.4 million to over 6 million students.

At present, far too many institutions house their libraries in facilities that are inadequate or unsuitable. In the next 10 years, libraries will require upwards of 6 percent of the estimated \$12 billion required for instructional physical facilities in higher education institutions. According to a recent Office of Education study, the cost of library buildings planned for 1956-70 was only about \$300 million, which represents less than half the actual need.

Research and Statistics

COOPERATIVE RESEARCH PROGRAMS

The Cooperative Research Program continued through 1961 to be a prime source for support of educational research in the United States. As the results from studies commenced earlier under the Program have begun to be available, the direct educational implications of these studies are becoming apparent in such fields as the

teaching of the mentally retarded, the detection and encouragement of students with special abilities, and improved instructional methods in mathematics and science.

The objectives of the Cooperative Research Program are to stimulate and support high quality educational research. To enhance these objectives three new types of activity have been undertaken:

1. Three programs for research development have been initiated: (a) Contracts are being made for surveying the status of research in selected fields; (b) a series of conferences of prominent researchers has been commenced for identifying major needs in areas where research is lacking; and (c) seminars for the purpose of analyzing the status of the research and devising new approaches to troublesome problems have been planned. Leading experts in areas where considerable research has been done are expected to participate in these conferences.

2. For the first time, the Program requested and reviewed proposals for field testing of research findings. Forty proposals were received, and seven of them were recommended and contracted. These field tests are based on the results of laboratory and classroom research and experimentation and are designed to translate these results into educational programs which are then tested in natural situations.

3. In view of the growing requirements of researchers and of the education community for information on the latest developments in educational research, the Program is expanding its dissemination activities. A series of monographs drawing together recent studies in areas of particular interest has been initiated. Among those published in fiscal 1961 were the following: *The Gifted Student*, *Motor Characteristics of the Mentally Retarded*, *Social Climates in High School*, *Influence of Voter Turnout on School Board and Tax Elections*, and *Research Problems in Mathematics Education*. Summaries of the final reports of all the research projects completed under the Cooperative Research Program are also being written. Copies of the complete final reports are available in over 59 key libraries throughout the country serviced by the Documents Expediting Project of the Library of Congress.

Clearinghouse of Studies in Higher Education

Since 1958 the Office of Education has compiled, analyzed, and interpreted data on educational research and experiments related to programs of the colleges and universities which furnished the data. During fiscal year 1961 the Office published a number of monographs based on these data. Among these were titles on college admission with advanced standing and independent study programs.

NEW EDUCATIONAL MEDIA

Grants Approved

The Advisory Committee on New Educational Media considered 221 separate applications for research grants during fiscal year 1961. Of these, 36 were approved by the committee and have been supported by grants of varying size. These 36 grants bring the total of National Defense Education Act, title VII research projects supported to 150. Final reports on 20 approved projects were submitted during this year.

Approximately \$3.41 million was expended during fiscal year 1961 for the support of new grants and continued support of grants approved in previous years. Grants from preceding years required slightly over \$2.4 million of 1961 funds, and the 36 projects approved in 1961 were supported with a little more than \$1 million from 1961 funds. An estimated \$360,000 was required in 1962 to bring these new projects to completion. These 36 grants were awarded to 25 separate institutions and nonprofit agencies in 15 States.

Areas of major interest to researchers concerned with the newer educational media are television, teaching machines, conventional audiovisual materials used singly and in combination, and the development of systems of instruction which would utilize the various educational media and teaching techniques. It is evident at this time that the research conducted under title VII will lead to more definitive statements concerning the production and use of educational television, and the instructional role of teaching machines and other newer media. This research is focused on programed self-instructional media, including teaching machines and specially programed printed materials, on investigations of learner-teacher variables involved in the most effective use of instructional materials, and on application of the principles of autoinstructional programing to such other media as motion pictures, television programs, and filmstrips.

Dissemination of Media Information

Slightly more than \$1.3 million was obligated for the support, under contract, of dissemination activities during fiscal year 1961. Approximately \$131,000 was required for continuation costs of projects contracted for in previous years. During the past fiscal year, 44 contracts were negotiated with 31 institutions, agencies, and individuals in 11 States and territories and 2 foreign nations. These 44 projects required the expenditure of almost \$1.19 million during 1961 and are estimated to require \$275,000 in additional support during fiscal year 1962. Thus, it is estimated that these 44 contracts will require approximately \$1.46 million to bring them to completion.

A major emphasis during fiscal year 1961 was the dissemination of research information, both on title VII activities and on nonfederally supported research completed or in progress. Final reports on title VII research are deposited in each State department of public instruction and in libraries throughout the country which participate in the Documents Expediting Project of the Library of Congress. In addition, these reports may be purchased on microfilm or Xerox print from the University Micro-Films, Inc., Ann Arbor, Mich. Under contract with the Department of Audio-Visual Instruction of the National Education Association, each title VII project is also being abstracted, and quarterly accumulations of these abstracts are published in cooperation with the Office of Education.

A second emphasis in the dissemination program during fiscal year 1961 focused on making instructional materials more available and accessible. The Educational Media Council investigated means for providing a comprehensive catalog of new issues of films, filmstrips, tapes, recordings, and slide sets. A contract has been made with the Council to develop a comprehensive media research cross-index. A pilot study was initiated at Western Reserve University by the Office of Education to determine the feasibility of electronic storage and retrieval of research in education.

A number of high priority dissemination projects were completed in 1961. Some of these were solutions to immediate problems. Others were part of a long-range information program aimed at providing the means for modifying and improving educational practices. Still others provided the basis for resolving fundamental problems regarding the role of communications media in the schools.

A special bibliography project, undertaken by Syracuse University, is valuable primarily to teacher-educators. This project produced a catalog of instructional materials, coded for quick and accurate reference, for teaching audiovisual courses. The American Library Association issued *Guides to Newer Educational Media*, which likewise includes annotated references to catalogs or lists in the new media field, issued between 1950 and February 1961.

The capstone of fiscal 1961 activities may well be the report of a major study contracted with and begun during the year by the National Education Association. This project on the impact of technology on education will culminate in memorandums, monographs, and a major study report which deal intensively with implications for the use of new media and technology in education. Surveys of media used throughout the United States and other countries which will aid in establishing national goals, standards, and guidelines, have moved forward. Information is being collected through surveys which are being made by the National Council on Visual Aids in London and

by the International Christian University in Tokyo. These surveys of media research in Europe and the Far East, coupled with the Purdue University International Seminar on Instructional Television, will assist in assessing American programs and practices.

CAPTIONED FILMS FOR THE DEAF

The first full year of actual captioned film service to groups of deaf persons ended June 30, 1961. The program by that date had 572 registered users in all States except Nevada and Alaska. Approximately 100 prints of feature-length captioned films became available as the year progressed and provided 948 bookings for a total audience of 92,550 viewers. Many registered users were unable to secure films because of the heavy demand upon the limited supply. At present, there are approximately 472 more groups registered than there are prints available, and more groups are being added to the list weekly. These groups are served on a first-come-first-served basis, and many requests must be turned down.

Operating under a contract budget of \$150,000, the Office of Education negotiated 5-year leases with motion picture companies to cover 44 new feature titles. When completed, this will add 176 new prints.

EDUCATIONAL STATISTICS

During fiscal 1961 the Office conducted 40 basic, general-purpose surveys of American education, and reported data from them. It also conducted a total of 20 recurring surveys in the field of higher education, relating to enrollment, faculty and other professional staff, earned degrees, receipts and expenditures, property, research and development activities, and organized occupational curriculums. Two surveys of State school systems were made, dealing with problems of organization, enrollment, teachers, schoolhousing, and finances of public elementary and secondary education. Studies of local school systems provided data for reports on current expenditures per pupil, secondary school programs, teacher turnover, adult education programs, and the beginning public classroom teacher. The Office also developed projections of elementary and secondary instructional staff requirements and salaries, school construction, and college enrollment.

The first scientific national study of programs of adult education conducted in local school districts was completed during the year.

The Office also began the first definitive survey of the status of college faculty members and how they regard and accept their careers. The study was based on a scientific sample of full-time instructional

staff. This study should provide important insight into reasons for entry into and causes for separation from college teaching. Such information will enable higher education institutions to meet more readily their requirements for increased numbers of faculty members in the 1960's.

The Office initiated two important surveys of nonpublic education below the level of higher education. Assisted by funds provided by the National Science Foundation, and utilizing mailing lists growing out of National Defense Education Act programs, basic surveys of organization, support, kinds of curriculums offered, number of graduates, teaching staff, and accreditation were begun for 5,000 secondary and 12,000 elementary schools. During 1962 a study will be made of the course offerings of the secondary schools. The information obtained will provide the first national data on offerings and enrollments of nonpublic schools conducted on a comparable basis and at a comparable period with a survey of the public secondary schools, in progress during 1961.

Under an agreement with the National Science Foundation, the Office began a complete survey of financial assistance received by graduate students attending American universities. When the amounts contributed from various sources are evaluated and compared with costs of graduate education, more complete data will then be available to assist in evaluating the financial resources for graduate education.

During 1961 a special Office task force completed a proposal for a new cooperative record and reporting system involving educational institutions and organizations of all States and using modern high-speed computing and tabulating equipment for the production of educational statistics, which would provide with a minimum of delay the information needed on the condition and progress of education.

Reorganization of the Statistical Operations Staff

Reorganization of the statistical operations staff of the Office of Education was initiated and progressed satisfactorily during the year. The new arrangement reflects a clear definition of the role of the central statistical operation in the Office. This role will essentially have two parts: (a) the rendering of professional statistical service to those conducting surveys, and (b) the conduct of the benchmark, basic type recurring statistical surveys.

When this reorganization is complete, it will strengthen, particularly, the capacity of the Office to plan and schedule its operations and to utilize efficiently electronic and electro-mechanical data-editing and processing equipment.

SECTION IV

Summary and Selected Goals

This report has set forth first a statement of the Nation's most urgent educational need: excellence—not expressed altogether in terms of buildings, equipment, and the necessary number of adequately paid teachers, but as an attitude which affects "the total process of education." A new focus is thus given to quality as it relates primarily to the curriculum and the teacher. Excellence, though never fully reached, demands of all—"administrators, teachers, students, and the general public—all that they are capable of achieving."

In fulfilling its obligation "to promote the cause of education in the United States," the Office of Education offers its leadership through assistance to all and cooperation with all in their commitment and dedication to this purpose.

Summary of Achievements

Among achievements of the Office of Education in five selected areas of activity during fiscal year 1961, the following are summarized:

1. The completion and release to the public of staff studies identifying the needs of American education on all levels.
2. The organization and dissemination of educational statistics and research results including (a) continued progress toward establishing a national cooperative system of educational data, (b) publishing of monographs on the results of educational research, and (c) continuation of the compilation and analysis of a nationwide inventory of physical facilities of colleges and universities.
3. The mobilization of professional leadership (and in some instances, lay leadership) to help solve educational problems in the areas of (a) educational media, (b) adult literacy, (c) coordination of educational research programs within and between States, and (d) the improvement and supervision of State programs in mathematics.
4. The administration of special educational programs such as (a) assistance to Cuban refugees, (b) Latin American language and area studies under title VI of the National Defense Education Act, and (c) the planning of corrective measures in the teaching of English, involving research, conferences, and the preparation and demonstration of curriculum materials and instructional practices.
5. The review of Federal programs in education involving (a) international educational activities, (b) higher education in the United

States, and (c) the effectiveness of the National Defense Education Act of 1958.

Summary of Shortages

The focus on quality in education, which was perhaps the outstanding characteristic of the educational year, revealed many inadequacies in American education. Educators, it would seem, are now more ready than formerly to entertain and to evaluate objectively, criticism of educational policies and programs, teaching and administration. They are coming to realize that such criticism is one of the bases of sound reevaluation and that healthy criticism of the status quo is necessary for progress toward excellence.

1. This report has pointed out in its introduction what must be considered a "major concern of the Nation"—the identification of individuals who have the native talent for teaching and the education of these individuals in a manner that fully qualifies them to assume the responsibility of teaching.

Supplying the necessary *number* of certificated teachers to take care of present and projected shortages will not in itself fill the need for qualified teachers. There are requirements for talent, personality, culture, and educational background which go far beyond the course requirements necessary for certification. Our society as a whole must place such a high regard on the teaching profession and must accord it such status and salaries that proper individuals will be attracted and committed to teaching, and the institutions that train teachers must revise their selection procedures to exclude those who have neither the talent nor the capacity to become teachers.

2. The need for adequate facilities for our elementary and secondary schools—instruction rooms and instructional materials—is a second area of shortage. The number of construction projects completed in fiscal 1961 and the number scheduled for the next few years will barely reduce the present backlog of approximately 142,000 instruction rooms reported by the States in the fall of 1960. The Federal Government, by present legislation, must restrict its aid in school building and classroom construction to areas where school attendance is increased because of Federal activities within those areas.

Funds approved under title III of the National Defense Education Act for improving facilities and purchasing equipment to improve the quality of instruction in science, mathematics, and modern foreign languages have contributed to improvements in thousands of schools since 1958–59, and students in these schools have benefited from the higher quality of instruction thus provided. But this kind

of improvement needs extension to certain other areas of instruction as well.

3. Allied to the needs for teachers and facilities in our schools are needs for providing opportunity for every student to develop his abilities to the highest degree of which he is capable. These needs are revealed in the unequal opportunities resulting from failure to identify students' potentials (from the talented to the slow learner); and in those caused by cultural and economic disadvantage, physical handicap, and mental retardation. The needs are further reflected in problems related to juvenile delinquency, unemployment conditions, and adult literacy.

4. The shortages in higher education institutions are in areas similar to those in elementary and secondary schools—an insufficient number of adequately prepared staff members and a lack of adequate facilities for housing and instructing the increasing numbers of students. The Federal Government has provided loans and scholarships to students (particularly those planning to teach), loans for housing construction, and grants and loans to institutions for numerous other purposes. However, unless additional funds are available to meet the demands of the decade ahead, there will be critical shortages of teachers and facilities.

5. In the general area of research and statistics, there is great need for a more comprehensive program covering all aspects of the educational process—administration, teaching, and learning—including plans for more effective dissemination of results. Research throughout the Nation must be coordinated to avoid dissipation of effort and to achieve direction toward essential objectives. Research must be coupled with rapid application of results of established value. Through demonstration and other means of dissemination of these results teachers should continuously be made aware of the best current methods of instruction.

These needs are closely related to need for improvement of teaching services in specific curriculum areas—notably English and modern foreign languages.

6. With a recognition by the principal foreign policy makers that education is a key aspect of foreign policy, it is now evident that to formulate successful programs of international education there must be closer cooperation among the various Federal agencies in the development of policies and programs for more effective use of the resources of our own educational system.

7. Furthermore there is great need that in our educational planning we consider certain broad social issues which affect the lives of all

citizens. Problems in this area are suggested by the need for a balanced education-manpower program which, while assuring the right of individual choice, would at the same time insure the Nation's strength. These problems are seen in the growth of urban populations and in the need for education in civil defense.

Selected Goals

Some of the major activities of the Office of Education for fiscal year 1961 have been summarized and certain shortages in the schools and higher education institutions of the Nation have been reviewed. The Office has formulated goals which it believes are necessary to meet the needs of the future. A selected list of goals covering some of the crucial areas and problems of American education follows.

GOAL AREA I: GENERAL SUPPORT FOR PUBLIC SCHOOLS AND ASSISTANCE TO COLLEGES FOR CONSTRUCTION

General School Aid.—The establishment of general Federal aid for public schools through the enactment of a school aid bill, or equivalent legislation for equalization of educational opportunity, and raising of the level of educational support.

Higher Education Physical Facilities.—Enactment of proposals for loans to construct academic facilities. This goal recognizes the fact that funds necessary for the construction of these facilities cannot be supplied wholly from present sources of income.

GOAL AREA II: ADVANCEMENT OF KNOWLEDGE AND DISSEMINATION OF INFORMATION RELATING TO EDUCATION

Educational Research: Organization and Program Scope.—Broadening of the Office's extramural research program, and of its working relationships with the total enterprise of educational inquiry, so that it will stimulate far more research and development than it directly supports, and so that every area of major educational concern will experience a ferment of reexamination resulting from the interaction of research, planning, analysis, and appraisal engendered by the program. Greater enlistment of top-quality research effort in developing ways to identify and nurture talent; to find corrections for developmental deficiencies arising from deprived economic and social background; and to eliminate barriers which mental and physical handicaps impose against social and economic productivity and personal self-realization. Establishment and maintenance of an effective program of basic and applied research, field testing, and demonstration of educational media.

Acceleration of national dissemination of research results and educational practice.

Progress Toward a Nationwide System of Educational Data.—Adoption of the proposal for a national cooperative system of educational information, based on scientifically precise reporting and machine processing of basic items of raw data; and the development of a calendar of Administration-approved steps to carry out this proposal.

Substantial and tangible progress, in cooperation with the States and private institutions, in developing common definitions of educational terms and other prerequisites to common reporting practices.

GOAL AREA III: ACTION PROGRAMS FOR CONSERVATION OF HUMAN RESOURCES

The National Logistics of Manpower in Relation to Education.—The planning and initiation of studies in cooperation with other agencies calculated to yield concrete policy propositions for achieving a balanced education-manpower program for long-range national strength.

Talent Development in Regular School and College Programs.—Confirmation of the favorable trends now tentatively indicated in the identification and guidance of able secondary students.

General acceptance of the principle that nurture of talent must begin systematically in the elementary grades and that it must be a continuous process throughout formal schooling; application of this principle also to the first two post-secondary years, by extension of the NDEA title V provisions to those years.

Enactment of provisions for a higher education Federal Scholarship Program.

Prevention and Correction of Underachievement Related to Cultural and Economic Disadvantage.—Provision of educational assistance to children and adults of migrant labor families.

Salvage and Rehabilitation of Persons Disabled by Mental or Physical Handicaps.—Expansion of existing laws to include additional categories of exceptional children. (It is estimated that only one-fourth of the children who need such services are now receiving them.) Lack of adequately prepared personnel is a major obstacle to the development of proper programs for these children.

Occupational Training and Retraining to Meet Problems of (a) Persistent Local Unemployment Conditions and (b) Obsolescence of Skills Through Automation and Other Technological Developments.—Development of close working relationships with Department of

Labor under the Area Redevelopment Act and under proposed acts which would assist in the adjustment of occupational skills to employment opportunities.

Youth Programs Related to Problems of Unemployment and Juvenile Delinquency.—Establishment of interagency cooperation for the Office's role in implementation of the pilot projects and training programs of the Juvenile Delinquency Act of 1961.

The Nation's Adult Education.—Instigation of action, in an appreciable number of States, to provide trained leadership for adult education as an integral part of public education. Adoption by a sizeable number of States of new or expanded programs for adult literacy. The planning and initiation of national clearinghouse service for information on action programs in education for aging.

Selection of urgent research problems, from the recommendations of the White House Conference on Aging, which fall in the area of adult education; and promotion of research on these problems through the Office's extramural research programs and through stimulation of institutions and other sponsors of research in education.

GOAL AREA IV: IMPROVEMENT OF PROVISIONS FOR INTERNATIONAL EDUCATION

Federal Cooperative Planning.—Our position among the nations and the increasing role played by education in relation to foreign policy and international affairs requires a new dimension in our thinking about the problems of education. We must cultivate a knowledge and an appreciation of our relation to other countries and other cultures, while at the same time we maintain a loyal though critical understanding of our own.

The responsibility of the Federal Government for providing leadership to insure these achievements rests heavily upon the Department of Health, Education, and Welfare and the Office of Education. These agencies should lead out in cooperative planning and the formulation of policies and programs among Federal agencies concerned, whereby these goals may be realized.

Education in International Understanding.—Early in 1962 the Commissioner of Education will convene a conference of outstanding persons from a number of areas of American life, who are vitally interested in American education, to discuss the impact of our international relations on American education. This conference will do much to clarify issues and to suggest approaches toward updating the curriculum of American schools and colleges and otherwise orienting it to changes throughout the world and to the position of the

United States in international affairs. The conference will also consider the basic differences between American and totalitarian institutions.

GOAL AREA V: ACTION PROGRAMS FOR IMPROVEMENT OF INSTRUCTION

Coordinated Attacks upon Instructional Deficiencies in Particular Fields, English and Foreign Languages Being Major Examples.—Strengthening the NDEA Language Development Program by adding opportunities for foreign study to the existing resources of the program, and by introducing a special focus upon Latin-American studies.

The infusing into the curriculum of our schools and colleges of an overall recognition of our relation to other nations and cultures.

Successful initiation of "Project English," a closely articulated program of providing appropriate Federal stimulation and assistance to the national effort for improvement of English instruction.

Extension to the field of English, by amendment to NDEA title VI, of the program of teacher training institutes. Extension of the benefits of the NDEA teacher institutes to teachers of English as a foreign language, in order to help American pupils whose native language is not English to receive proper language instruction in English.

Reappraisal of Vocational Education Field and of Related Legislation.—The rendering of advice and/or staff assistance to the President's proposed national advisory body on vocational education, to enable it to advance practical proposals to accomplish the following objectives: (a) provide vocational education with a flexibility to meet shifting employment patterns, (b) define the proper place of vocational in relation to nonvocational or general education, (c) estimate expenditure needed for the total vocational education effort.

Study of Teacher Recruitment and Retention.—Develop the knowledge to recommend teacher personnel policies offering promise of improvement in staff quality and performance. As one example, the compilation of the most significant developments throughout the Nation relating to the recognition of individual merit in the compensation of teachers.

School and Academic Libraries.—The enactment of legislation to eliminate the lack of school libraries in many of the Nation's public elementary and secondary schools; eliminate the critical shortage of trained librarians; and improve the poor quality of a large percentage of the libraries in junior colleges, 4-year colleges, and universities.

GOAL AREA VI: EDUCATIONAL ADAPTATIONS BASED UPON OTHER BROAD SOCIAL ISSUES

The Urbanization of American Life.—Substantial progress in analyzing the educational implications of urban growth, in identifying solutions to urban educational problems, and in delineating the desirable Federal role in these solutions.

Educational Problems Attendant to School Desegregation.—Development of a program of research and analysis on the educational problems a school system faces when desegregation begins, and dissemination of the results in a timely and appropriate manner.

Civil Defense Education.—Strengthening of the Office's civil defense educational activities by (a) increasing its capacity to provide educational materials to elementary and secondary schools, and (b) extending its coverage of adult education in civil defense from the present 15 States to every State in the Union.

Table 1.—Enrollment in 50 States and District of Columbia, 1959-60 and 1960-61

[Office of Education estimates]

Grade level and type of school	1959-60	1960-61
<i>Kindergarten through grade 8:</i>		
Public school system (regular full-time).....	27,800,000	28,400,000
Nonpublic schools (regular full-time).....	5,400,000	5,200,000
Other schools ¹	180,000	200,000
Total, kindergarten through grade 8.....	33,380,000	33,800,000
<i>Grades 9 through 12:</i>		
Public school system (regular full-time).....	8,400,000	8,900,000
Nonpublic schools (regular full-time).....	1,100,000	1,100,000
Other schools ¹	90,000	100,000
Total, grades 9 through 12.....	9,590,000	10,100,000
<i>Kindergarten through grade 12:</i>		
Public school system (regular full-time).....	36,200,000	37,300,000
Nonpublic schools (regular full-time).....	6,500,000	6,300,000
Other schools ¹	270,000	300,000
Total, kindergarten through grade 12.....	42,970,000	43,900,000
<i>Higher education: Universities, colleges, professional schools, junior colleges, normal schools, and teachers colleges (degree-credit enrollment).....</i>	3,750,000	4,000,000
Total, elementary, secondary, and higher education.....	46,720,000	47,900,000

¹ Includes Federal schools for Indians, federally operated elementary-secondary schools on posts, model and practice schools in teacher training institutions, subcollegiate departments of colleges, and residential schools for exceptional children.

Table 2.—Grants and other financial assistance to States, administered by the Office of Education, for fiscal year 1961¹

States and outlying parts of the United States	Colleges for agriculture and the mechanic arts	Cooperative vocational education	Maintenance and operation of schools (Public Law 874)	School construction (Public Law 815)	Library services	Defense educational activities	Mentally retarded	Total
Total ²	5,051,500	39,797,724	207,639,466	59,248,636	7,414,221	450,189,647	813,682	372,822,569
Alabama.....	100,541	1,060,159	4,271,452	553,142	207,576	1,734,665	10,200	7,937,737
Alaska.....	71,283	105,652	6,027,884	1,009,446	49,191	97,954	8,867	7,370,278
Arizona.....	77,477	206,968	4,467,295	2,017,414	72,485	154,130	.....	6,995,770
Arkansas.....	89,047	781,731	941,269	1,089,905	164,544	756,661	6,500	3,829,659
California.....	175,599	2,220,802	38,421,578	10,840,539	239,322	3,342,851	53,601	55,294,293
Colorado.....	83,218	352,907	4,109,053	557,201	88,084	808,258	52,337	6,051,061
Connecticut.....	90,022	361,691	2,080,633	880,920	74,755	1,046,073	11,500	4,545,596
Delaware.....	73,172	179,883	668,678	.....	51,585	181,449	.....	1,154,773
District of Columbia.....	.....	33,252	.....	.....	.....	187,768	.....	221,021
Florida.....	97,644	686,591	5,158,191	1,302,700	133,235	740,415	16,300	8,135,079
Georgia.....	104,360	1,127,357	4,896,258	1,320,036	221,848	2,471,262	23,200	10,164,324
Hawaii.....	2,299,985	178,475	4,502,517	2,844,890	55,087	158,316	.....	10,089,273
Idaho.....	75,871	234,186	1,434,198	246,120	75,211	405,704	11,667	2,482,959
Illinois.....	156,905	1,677,681	3,236,587	923,064	230,178	2,769,566	39,100	9,033,084
Indiana.....	109,244	970,816	1,058,263	664,119	60,341	386,067	.....	3,249,452
Iowa.....	96,145	839,274	613,681	105,606	173,427	855,214	13,400	2,676,750
Kansas.....	89,005	568,505	4,571,963	1,036,504	75,902	826,352	19,700	7,187,912
Kentucky.....	99,374	1,041,638	1,128,988	3,200	221,203	975,497	.....	3,469,902
Louisiana.....	96,768	914,629	752,209	228,409	158,010	662,605	15,850	2,828,481
Maine.....	79,115	231,863	1,912,536	429,420	83,021	297,710	5,100	3,088,766
Maryland.....	93,371	437,681	9,675,877	4,133,342	170,000	868,576	.....	15,378,851
Massachusetts.....	116,788	724,412	6,374,189	812,195	86,000	1,553,276	10,600	9,682,464
Michigan.....	133,559	1,402,973	1,506,463	1,977,564	214,885	3,574,758	36,350	8,846,554
Minnesota.....	99,750	914,682	4,044,564	205,198	165,888	1,596,483	30,235	3,416,804
Mississippi.....	91,735	908,749	1,245,006	945,015	191,340	313,243	.....	3,695,090
Missouri.....	109,448	1,120,191	2,528,242	498,417	185,931	431,165	.....	4,873,397
Montana.....	75,895	208,601	1,503,335	1,358,726	72,427	285,493	12,200	3,516,680
Nebraska.....	83,222	442,032	2,172,308	914,137	108,519	676,476	5,700	4,022,395
Nevada.....	71,596	181,990	1,097,452	406,353	50,395	123,823	9,800	1,941,413
New Hampshire.....	75,319	177,220	1,178,898	189,228	62,087	172,333	.....	1,855,087
New Jersey.....	118,233	843,663	3,746,583	1,247,677	103,153	1,633,281	17,550	7,710,140
New Mexico.....	76,794	230,955	4,835,049	3,394,298	73,042	497,407	15,468	9,123,015
New York.....	217,933	2,558,040	6,312,333	1,017,762	249,152	3,482,012	106,500	13,944,097
North Carolina.....	110,518	1,428,296	2,191,066	894,605	302,331	1,970,039	14,799	6,911,656
North Dakota.....	76,180	292,423	459,215	743,801	126,436	51,552	4,900	1,754,510
Ohio.....	149,269	1,747,073	4,745,438	1,089,004	270,635	3,501,571	27,035	11,580,026
Oklahoma.....	92,278	659,456	6,706,965	1,878,772	134,239	1,249,461	.....	10,721,173
Oregon.....	85,175	405,819	911,525	370,018	127,216	225,959	13,567	2,139,283
Pennsylvania.....	174,719	2,186,230	5,331,567	12,880	341,396	2,303,339	53,486	10,403,620
Rhode Island.....	77,899	158,947	1,751,448	169,625	59,769	455,594	20,800	2,694,084
South Carolina.....	91,117	748,626	3,194,899	708,280	196,082	388,161	.....	5,327,170
South Dakota.....	76,511	297,069	1,841,529	833,962	82,462	311,196	6,100	3,448,831
Tennessee.....	102,835	1,126,372	2,177,206	192,930	219,097	858,625	42,069	4,719,138
Texas.....	146,920	1,966,395	11,169,323	3,244,827	285,264	1,240,862	34,000	18,087,592
Utah.....	76,871	192,098	1,686,798	602,040	63,275	204,963	10,600	2,836,649
Vermont.....	73,768	187,028	73,482	.....	63,385	137,399	.....	535,063
Virginia.....	103,104	1,017,822	13,413,010	4,120,655	211,253	211,604	.....	18,654,239
Washington.....	93,730	589,354	8,497,217	543,555	125,287	714,370	.....	10,563,518
West Virginia.....	90,005	644,329	107,701	13,884	167,674	469,499	10,200	1,503,295
Wisconsin.....	104,260	989,755	725,150	198,110	180,736	1,398,357	34,000	3,630,371
Wyoming.....	72,898	168,333	668,243	274,986	54,209	67,358	10,400	1,316,429
Guam.....	.....	72,342	602,140	204,139	15,495	79,856	.....	973,972
Puerto Rico.....	50,000	839,621	.....	.....	209,077	664,465	.....	1,763,164
Puerto Islands.....	.....	49,291	83,130	.....	11,079	56,175	.....	199,678
Wake Island.....	.....	105,401	.....	.....	.....	.....	.....	105,401
Undistributed.....	.....	.....	8,468,858	.....	.....	.....	.....	8,468,858

¹ On a checks-issued basis. Does not necessarily agree with allotments or expenditures for a given year.² Inasmuch as the cents have been dropped from this table, a totaling of any column may or may not equal the total given for that column.³ Does not include payments made to Army, \$5,174,772.85; Navy, \$1,772,784.92; Air Force, \$1,520,300.79; and Veterans Administration, \$999.50.⁴ Does not include amounts paid for loans and repayable advances or amounts paid to institutions under the National Defense Education Act for \$93,057,049.15; or to jurisdictions other than States to assist Cuban refugees in educational pursuits for \$442,690.⁵ Includes \$2,225,000 special land-grant college aid paid under Public Law 86-624.

Food and Drug Administration

Introduction

THE FOOD AND DRUG Administration is a unique agency. There is nothing quite like it in any other nation of the world. It is a scientific institution devoted to law enforcement to protect the consumer of foods, medicines, cosmetics, and common household chemical aids.

Its charter was first established in the Federal Food and Drugs Act of 1906. This pioneering consumer protection law was the product of a budding industrial revolution, which saw the processing of food moving out of the home kitchen into the commercial cannery and which found the charlatan far ahead of medical science in his blatant claims for the "wonder drugs" of the day.

But the original charter has been expanded many times by modernization and extension of the law to keep pace with industrial and scientific progress in the production of new products. The courts have interpreted the law in full recognition of its original high purpose. The keynote of the philosophy of the Food and Drug Administration in carrying out its mission was sounded in the language of a Supreme Court decision interpreting the law as modernized in 1938:

"The purposes of this legislation . . . touch phases of the lives and health of people which, in the circumstances of modern industrialism, are largely beyond self-protection. Regard for these purposes should infuse construction of this legislation if it is to be treated as a working instrument of Government and not merely as a collection of English words."¹

The Food and Drug Administration's philosophy for the accomplishment of its mission, consistent with this interpretation by the Supreme Court, is simply: To enforce the laws entrusted to it firmly but evenhandedly and without partiality; to seek prevention of violations to the fullest extent possible; and to inform consumers of

¹ *U.S. vs. Dotterweich*, 1943, 320 U.S. 277.

Chart 1.—RETAIL SALES OF FOOD IN THE UNITED STATES, 1951–60

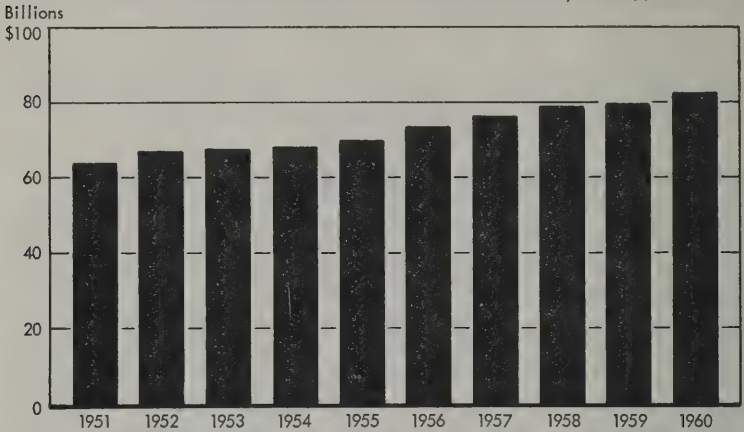
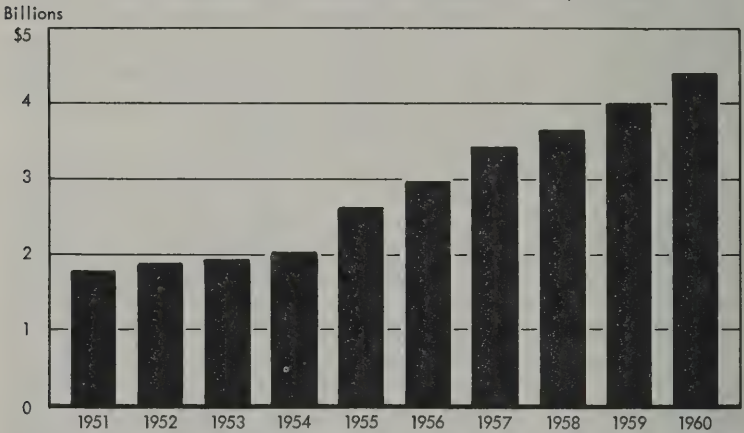


Chart 2.—RETAIL SALES OF DRUGS IN THE UNITED STATES, 1951–60



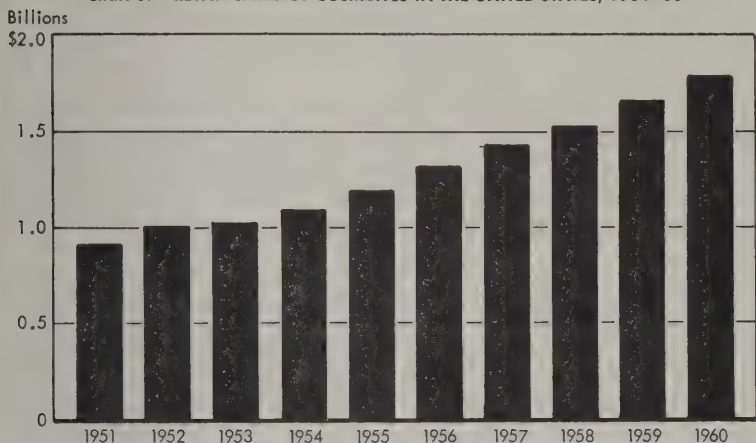
means by which they can help themselves to get the most protection with the least help from the Government.

But if the Food and Drug Administration's mission and philosophy can be so simplified, the accomplishment of the mission is tremendously complex. It requires the meshing together of law, science, and administrative judgment to assure a maximum of consumer protection, a minimum of interference with legitimate business, and a fostering of the progress which has made our Nation great.

This is the task which confronts the Food and Drug Administration.

The Food and Drug Administration has in the past decade seen fundamental changes in the laws it enforces and in the industries subject to these laws. During this period there has also been a

Chart 3.—RETAIL SALES OF COSMETICS IN THE UNITED STATES, 1951–60



growing awareness of the agency's responsibilities by the Congress and by the consuming public.

The regulated industries are growing at an amazing rate. Sales of foods in the decade from 1951 to 1960 increased from \$63.4 billion to \$82.1 billion (see Chart 1). Expenditures for drugs showed an even more dramatic increase, rising from \$1.8 billion in 1951 to \$4.4 billion in 1960 (see Chart 2). During the same decade cosmetic sales nearly doubled, increasing from \$913 million to \$1.8 billion (see Chart 3). During this period, American consumer expenditures as a whole increased about 57 percent. It is estimated that about 30¢ out of every dollar now spent by consumers is for products falling under the jurisdiction of FDA, and it is expected that this rate of increase for sales of foods, drugs, cosmetics, and household chemicals will be at least as great during the decade of the sixties.

Some new developments are related only to the increasing volume of production required to supply a rapidly expanding population which is changing its patterns of living. But the putting to work of the discoveries of modern science itself is making these changes in living patterns possible. Producers and handlers of foods use more than 3,000 chemical additives. These additives are used in the processing and packaging of food so that it can be transported for thousands of miles and remain in good condition for long periods—a wonder of modern civilization. They are used in the commercial preparation of convenience foods which have brought a revolution in the domestic kitchen and freed homemakers of several hours a day to devote to other occupations. They have also eliminated seasonal restrictions on the widest variety of nutritional foods ever available to consumers.

Manufacturers of 40 million tons of "special formula" commercial feeds each year add a variety of chemicals to promote growth, increase feed utilization, and control diseases of farm animals. Some are safe vitamins, others toxic chemicals, such as arsenicals and hormone-like substances that must be properly mixed at the plant and properly used by the farmers so that the meat, milk, and eggs these animals produce will be free of harmful chemicals. Farmers must also avoid illegal residues in crops on which they use 600 million pounds of pesticides a year to produce the abundant variety of fruits and vegetables found in every supermarket.

The pharmaceutical industry has provided new drugs that have brought startling advances in medicine since 1938 when safety clearance before marketing was first provided by law. New drugs cleared by FDA after reviewing the manufacturers' scientific studies during the 23-year span account for more than 90 percent of the prescriptions written today. Many dreaded and often fatal diseases are now readily and successfully treated.

The hundreds of millions of dollars industry spends on research every year will continue to produce new technological developments that will bring new foods, drugs, and cosmetics. But every new development brings the need to know whether hazards are involved, and if so, how to solve the problems presented. There are and will be new hazards as well as benefits. Dangerous side effects often develop after the use of potent drugs. As more new chemicals are added to food the probability of misuse increases. Careful safety testing is required of cosmetics containing many new synthetic materials.

Errors have occurred, recalls of dangerous drugs and cosmetics have been necessary, patients have had serious drug reactions. Fortunately, there have been no cases of spectacularly poisonous foods in the United States that have injured large numbers of people. Some other countries have not been so fortunate. In 1959 the deliberate addition of motor oil to cooking oil in one country caused paralysis of 10,000 consumers. In 1957 the use of an untested new emulsifier in margarine resulted in 50,000 illnesses in another country.

However, in this country nitrite was used to "revitalize" stale fish fillets and caused a little boy to die and several others to become ill. And, in 1957, poisonous fat added to feed killed millions of chickens. Studies are still in progress to learn the nature and origin of the toxic factor or factors, and whether there are any implications for fats used in human foods.

In the early days of food-law enforcement, chemists were dealing with crude and flagrant adulterations that did not require elaborate analytical techniques. Now, FDA scientists must contend with

radioactive contamination and organic pesticide residues in food crops, the possibility of the addition to food of cancer-producing substances, the bacteriological contamination of frozen precooked foods, and many other problems that are discussed in this report. Fortunately, the technological advances which have revolutionized the food and drug industries have also given the food and drug scientist new laboratory and inspection tools which can be applied to new enforcement problems.

The major legislative changes in the past 7 years have centered around chemicals in foods, drugs, cosmetics, and household items—new products, new uses, and the urgent need for safety controls. The trend has been to establish the basis for preventive safeguards, so that the Government does not have to carry the full burden of proof of safety, as it did when the Food, Drug, and Cosmetic Act became the basic law in 1938.

Those petitioning for regulations to establish safe use of chemicals under the Pesticides Chemicals Amendment of 1954, the Food Additives Amendment of 1958, and the Color Additive Amendments of 1960, must present their own scientific evidence that such uses will not endanger consumers—provisions similar to the new-drug safety clearance provided by the 1938 law.

After these regulations are established by administrative procedures—based on FDA's evaluation of the safety studies reported, and consultation with outside scientific experts when necessary—the limits of use established become the yardstick for all to follow. This includes the manufacturers who label the chemicals with directions for use, the agricultural experts who advise the growers, the growers themselves, the control chemists in processing plants, FDA in its enforcement activities, and the courts in judging compliance with the law.

Where deep conflicts develop between economic interests and the health of the American people, Federal, State, and local food and drug agencies must give health considerations top priority. They must make the best use of present knowledge and facilities but take a bold, enlightened approach—a look ahead to meet the problems that new developments will bring.

Additional personnel, more and better scientific law enforcement facilities, and amendments to the basic laws where experience shows they are not strong enough are going to be necessary if adequate consumer protection is to be provided. Public support—the support of an aroused and intelligent public opinion—is essential to achieving these goals. People demand continuing improvements in their foods, drugs, and cosmetics, but when they know the hazards that may be

associated with some commercial applications of new scientific discoveries, they also demand protection from these hazards.

Progress in Enforcement Operations

To carry out FDA's enforcement responsibilities—and this is the hub of all its activities—the coordinated efforts of all of its Bureaus and Divisions are required.

The Bureau of Program Planning and Appraisal acquires basic data on the areas of FDA responsibility, such as size and location of various industries subject to the Federal laws, number and types of violations being encountered in each industry, and the comparative seriousness of violations in the whole spectrum of consumer protection. These data, along with the pulse-taking of consumers' needs through the Consumer-Consultant Program, are used in formulating enforcement policy; in determining the best use of available manpower for attention to various types of violations; and in locating areas needing more attention when additional inspectors, analysts, administrative staff, and facilities will permit.

The Consumer-Consultant Program was expanded through a series of FDA-Consumer conferences arranged by Consumer Consultants in 16 of the FDA Districts, with programming assistance by the District staffs. At these conferences the FDA's enforcement programs were explained to consumers, and participants were given an opportunity to express the viewpoints of their organizations about additional areas of protection needed by consumers of foods, drugs, and cosmetics.

The Bureau of Enforcement consults with industry representatives to assist in compliance and reviews cases forwarded by the Districts to determine whether or not they should be recommended to the Department of Justice for prosecution. It also establishes guidelines for the Districts to provide uniform enforcement criteria throughout the country. Food and Drug specialists in the Department's Office of the General Counsel participate in these decisions, and also act in liaison capacity with the Department of Justice on court cases recommended for prosecution.

The Bureaus of Medicine and Biological and Physical Sciences furnish scientific facts on which policies are based, both in regulation-making and in enforcement. Their scientists must keep abreast of the ever-changing developments and plan research that will serve as a sound basis for FDA activities. Never before in the history of food and drug enforcement have these Bureaus played such a crucial role. The later sections "Scientific Investigations" and "New Drugs" outline some of their scientific work in this area.

The Bureau of Medicine and the Division of Nutrition also have the responsibility of separating the true from the false—a fact-finding process on which the FDA programs against quackery are based. Medical and nutritional quackery, now estimated to result in a billion dollar-plus annual “take” on the American pocketbook and, even more important, an untold burden on the public health, are deemed by public health experts to constitute a major problem in consumer protection.

The Office of the Commissioner, which furnishes overall leadership in establishing and announcing policies after the Bureaus present and translate the facts and their long-range implications, has a number of staff divisions to assist in carrying out its functions.

The Division of Public Information serves both consumers and industry in its information and education activities. All of the recent independent studies of the overall needs and deficiencies of the Food and Drug Administration have pointed to the public benefits to be derived from industry and consumer education programs.

Often an inquiry from a consumer reflects the questions or views of a whole group. Prompt and helpful replies to such inquiries assist FDA regulatory work, because well-informed consumers can help protect themselves by intelligent reading of the material the law requires in labeling, and by refusing to become victims of quackery and fraudulent schemes. Consumers also need background and knowledge to benefit from new protective laws, such as the Federal Hazardous Substances Labeling Act which was designed to provide warning labeling and directions needed for the safety of the family.

Industry education is aimed at explaining the law, regulations, and new programs to achieve better compliance. Informational services include news releases for the trade press, distribution of regulations and official notices published in the Federal Register, preparation of special publications and reports, and cooperation with trade associations that are seeking to stimulate voluntary self-policing. In the fiscal year 1961, new food-additives regulations, changes in effective dates of food-additives regulations, and new color-additives regulations required many interpretive releases. In addition, the regulations under the Federal Hazardous Substances Labeling Act brought new educational responsibilities, because many industries never before subject to FDA enforcement were concerned.

Increased emphasis has been placed on coordinated work with the States by expansion of the Division of Federal-State Relations. At the annual conference of the Association of Food and Drug Officials of the United States, held in Washington in June, emphasis again was placed on the benefits to the public of continued integration of Federal and State resources, the need for uniform food and drug

legislation in the States that have not yet adopted the provisions the Association recommends, and the strengthening of State facilities.

The Division of Administrative Management—among its other responsibilities, such as budget, fiscal operations, procurement, and housekeeping work—has in its personnel activities a key task in the FDA expansion program. The increase in the staff in the past 6 years has required a program of recruitment designed to attract the best of the graduating scientists, who are often offered better financial returns from industry, and of training the recruits so that their skills may be used in this specialized field without undue delay.

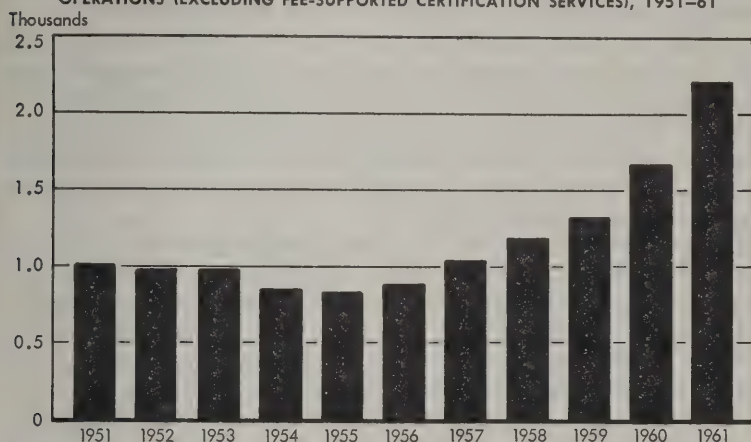
Personnel training is not limited to recruits, since the older members of the staff require continuous training in new techniques that must be employed, as for example, the use of new analytical techniques, such as spectrophotometry, chromatography, and radiological detection and measurement. Inspectors are given advanced courses in such areas as drug inspections, sanitation, and use of the senses of taste and smell to detect spoilage, all to increase their abilities to detect trouble spots during factory inspections. The clerical staff, too, requires training courses to keep records, travel, inventory, and other supporting activities operating efficiently with a growing staff. These basic training programs will be expanded in the next fiscal year.

FDA has had a long tradition of vigorous enforcement of the laws assigned to it, but has long been aware of the fact that its stewardship must be reviewed from time to time by representatives of various interested groups of the public as a whole, in addition to the annual review by their representatives in Congress.

Progress has continued during the fiscal year—in size of staff (see Chart 4), building construction for Washington and the field offices, in educational activities, and in streamlining administrative work for better efficiency as recommended by the 1955 Citizens Advisory Committee. However, basic changes in the laws administered have brought new obligations not contemplated in the recommendations of that Committee. A new overall study is underway by a new Citizens Advisory Committee appointed by the Secretary in October 1961 so that total current responsibilities may be taken into account, and a new evaluation made of the amount and kind of protection consumers need and how the desired objectives may be attained.

A committee appointed by the President of the National Academy of Sciences and its National Research Council was requested to review the policies and procedures used by FDA in reaching decisions concerning the approval of new drugs and the certification of antibiotics. This Committee concluded that FDA decisions in these areas have been in the interest of public health. The Committee pointed to weaknesses in the current law and deficiencies in staff and funds and

Chart 4.—BUDGETED POSITIONS FOR FOOD AND DRUG ADMINISTRATION ENFORCEMENT OPERATIONS (EXCLUDING FEE-SUPPORTED CERTIFICATION SERVICES), 1951–61



recommended that FDA be given statutory authority to improve its protective controls over the production and distribution of drugs, including antibiotics, that pretesting procedures be extended to other important drugs in addition to antibiotics, and that more funds and staff be given to FDA to strengthen its overall drug program and related research projects.

Another group, appointed by the Secretary to investigate certain charges involving FDA employees and operations, reported to him that the inquiry did not develop evidence that any present employee of FDA has personal financial interests conflicting with the objectives of his employment. Among the conclusions reported were:

“We conclude that the essential functions of the Food and Drug Administration have been and are being performed.

“We conclude that FDA personnel are more than ordinarily dedicated to the purposes of the agency.

“We conclude that decisions have not been made in defiance of the public interest or to conform with considerations of personal gain or aggrandizement.”

The total budget for fiscal year 1962 is \$21,854,000, compared with \$18,848,000 for fiscal year 1961—a net increase of \$3,006,000. This budget provides for an increase in personnel of 213 positions so that the total staff authorized for 1962 is 2,412. The 1962 budget reflects increases occasioned by two major factors: (1) the rapidly growing demand placed on existing services of the FDA resulting from large increases in our population and corresponding increases in the number and volume of consumer products falling within the authority of

the FDA, and (2) new programs and responsibilities of the FDA resulting from advancing technology and new legislation.

About two-thirds of these new positions will go into areas particularly needing strengthening, the pesticides and drug programs. By an increase in sampling the estimated annual 2,500,000 interstate shipments of food crops, approximately 8,500 shipments can be sampled to test for toxic residues in 1962 in contrast to about 5,000 in 1961. Recommendations for staff increases for the drug program were discussed earlier in this report.

Other staff increases will be made in field supervision, administrative activities, enforcement review of cases, consumer and industry information and education services, and program planning activities.

Provisions for special research include work on frozen foods, bacteriological training for inspectors, sanitation techniques, food sample analysis, cosmetics, fats, and fatty acids.

The 1962 appropriation provides \$1,397,000 for continued improvement of FDA field facilities. Renovation of the offices in Boston, Cincinnati, Minneapolis, and Kansas City (begun in 1961) will be completed in 1962. Partial first year costs to renovate New York facilities were supplemented. The appropriation also provides funds to begin construction in Baltimore, Chicago, New Orleans, and Seattle. The new Dallas District facility was dedicated in January 1961. (This new District brought FDA's total to 18.) Completion of new buildings for Detroit and Atlanta were mentioned in previous reports.

Construction was started in midwinter on the new FDA headquarters-laboratory building in Washington. The target date for occupancy of this badly needed structure is the fall of 1963. Meanwhile the staff is handicapped by dispersal into widely scattered locations with antiquated facilities. Some Bureaus have units in as many as three locations.

An 195-acre site for the construction of a new animal research facility at Beltsville, Md., has been made available through the cooperation of the Department of Agriculture. The building is expected to be completed in 1963. The facility will furnish housing for experimental animals and a laboratory building for conducting animal research work.

Food, Drug, and Cosmetic Act

ON THE FOOD FRONT

Hurricane "Donna" caused commercial food losses along the Atlantic Coast in September 1960, from the Florida Keys to Rhode Island. Inspectors from FDA Districts assisted State and local officials in

protecting the public from contaminated products through segregation of stocks and supervision of cleaning and destruction operations. In most affected areas the major damage was to retail and wholesale stocks that were inundated or spoiled because of power failure.

Polluted harbor water from Donna's force damaged large quantities of food awaiting import entry or export loading on piers in lower Manhattan and Brooklyn. Local embargoes were placed on domestic products and FDA detentions on imported merchandise to permit an orderly handling of affected lots. Fifty-four domestic lots, aggregating 189 tons, were seized, and some 337 import lots—including more than 1,300 tons of coffee and cocoa beans and large quantities of tea and spices—were denied entry into the country.

Torrential rains in February and March 1961 brought several Alabama and Mississippi rivers to their highest levels in 30 or 40 years. Close cooperation with State officials resulted in the sorting and destruction of damaged foods, drugs, and cosmetics valued at \$100,000.

Heavy losses of bulk wheat resulted from three large fires. At Portland, Oreg., State officials supervised salvage operations on 6,700 and 9,000 tons, respectively. A fire in a Colorado elevator resulted in seizure of 1,269 tons so that salvage could be monitored and proper disposition made of damaged wheat.

Radioactivity in Foods

In order to carry out the responsibilities assigned to the Department by the President and delegated to the Food and Drug Administration by the Secretary, FDA increased its radiological program staff to 116, a boost of 90 positions over fiscal year 1960. This staff is assigned to determining, establishing, and enforcing permissible levels of radioactivity in foods, drugs, and cosmetics, and monitoring these products by collection and examination of samples to determine current levels; conducting research for identification, evaluation, and decontamination of radioactivity in such products; and regulatory and information work related to radioactivity.

Equipment to test food for individual radioisotopes was installed in the Washington and 10 field District laboratories. Samples of 200 domestic and imported foods collected by all 18 field Districts were analyzed for strontium 90 and cesium 137. The highest values for strontium 90 and cesium 137 found in foods were well within the safe limits as suggested by the Federal Radiation Council. With the resumption of large-scale nuclear weapons-testing in the summer of 1961 the sampling and testing of foods for radioactive fallout is being increased several fold.

Chemicals in Foods

Food Additives.—FDA announced on December 1 that a scientific committee appointed by the Secretary had found that safrole is a “weak hepatic carcinogen.” Immediate action was taken to stop the use of safrole and oil of sassafras in root beer, sarsaparilla, and other beverages and foods, since the Food Additives Amendment prohibits use in foods of any substance which has been found by feeding or any other appropriate tests to produce cancer in man or animals.

A year earlier upon hearing that the safety of these flavors was being questioned many manufacturers of soft drinks began to switch to other flavors. Also, the American Bottlers of Carbonated Beverages called for voluntary industry steps to eliminate these flavors from soft drinks. Thus when the harmful character of the flavors was definitely established, their use had already been discontinued. An extensive survey by FDA inspectors completed late in November, covering 3,200 bottlers and suppliers, disclosed that the industry had withdrawn safrole and oil of sassafras from use before the requirement that they do so was published. Seizure was required of only one small lot of oil of sassafras located in a beverage plant several months later.

Fifteen seizures were made between March and June of vitamin preparations and food supplements containing more than 0.4 milligram of folic acid per daily dose and not labeled for sale upon prescription only. The statement of policy announcing the application of the Food Additives Amendment to vitamins containing folic acid is discussed under “Regulation Making Activities.”

One other seizure for violation of the food additives provisions involved mineralized cookies containing iodine and boron from kelp, for which no tolerance or exemption had been prescribed.

As the number of tolerances established increases, the inspection load will grow proportionately, since checking on the proper use of food additives is now one of the essential elements of food establishment inspections.

Pesticides.—In 1938, farmers commonly used less than a dozen primary chemicals to control insects and other farm pests. Today, they use over 200 primary chemicals in more than 45,000 formulations, at the rate of 600 million pounds a year. To assure use of these pesticides so that they will not leave illegal residues in or on agricultural commodities, FDA surveys practices of growers, collects and examines samples for regulatory action if required, assists other groups in teaching farmers the importance of proper application of pesticides, and develops and improves analytical methods for their detection and measurement.

Sixteen seizures totaling 385 tons were made during the year of raw agricultural commodities containing unpermitted pesticide chemicals or residues in excess of established tolerances. Eight of the seizures involved carload lots of grain contaminated with seed grain that had been treated with poisonous mercurial fungicides. Seven seizures were made of leafy vegetables with illegal residues of parathion, toxaphene, and DDT. Peanuts with excess DDT were also seized.

The vegetable seizures all resulted from failure to follow recommended practices on the amount or timing of the insecticide application, or both. A West Coast artichoke grower, for example, entrusted spraying of the crop to an individual who was uninformed as to the U.S. Department of Agriculture recommendations. The applicator used whatever pesticide he wished, whenever he wished, and in whatever amount he wished. The grower entrusted another individual to harvest the crop, which he did without attempting to correlate picking times with spraying times. As a result, until two shipments of his high-residue artichokes were seized in Massachusetts, the grower had no knowledge that he was distributing violative products.

In many cases growers withheld shipments when they learned that FDA had found that the produce contained excess residues. An innovation, operated on a trial basis at the urging of several grower groups, was notification to the grower of the results of FDA examination of samples of his crop for the presence of pesticides. These results are also reported to appropriate State officials to help prevent intrastate shipments of lots bearing illegal residues.

Many States have intensified educational and enforcement activities; this has increased awareness of hazards involved in poor spray practices and in the feeding of field wastes to food-producing animals. In contrast to the previous year, no seizures were required of dairy products containing pesticides or antibiotics residues. Continued pressure is a "must," however, if these gains are to be maintained.

Color Additives.—FD&C Red No. 1 was removed from the provisional list of color additives on November 22 after new experiments had shown that it produced liver damage in test animals. This color was used in a variety of foods, including maraschino cherries, hot dog casings, and ice cream. Previously issued certificates for this color were cancelled on the same date to prevent any further use in foods, drugs, or cosmetics for internal consumption.

Food color pastes were voluntarily recalled in June by a manufacturer who had mixed certified color with vegetable fat without having the mixture recertified.

Other Harmful Contaminants

Soybeans contaminated with poisonous *crotalaria* seeds were seized in 34 Federal court actions involving 47 carloads containing 2,322

tons. Twenty-three of the carlots originated in South Carolina, 18 in North Carolina, and 6 in Arkansas. In addition, Virginia State officials embargoed 49 carloads.

Since the 1920's, State and Federal agronomists have recommended planting crotalaria, a legume, as a soil-improving crop for sandy soil. This soil, originally used primarily for cotton, was later used more extensively for soybeans, particularly in the Southeastern States. Following reports that mortalities in poultry flocks were due to crotalaria remaining in feed, FDA investigated the extent to which the seed remained in grains and soybeans during harvest and its toxicity to experimental rats.

When it was found injurious to rats, it was generally recognized by State and Federal agencies that the planting of crotalaria must be discouraged, since its presence in soybeans makes it a deleterious ingredient under the Federal law. The problem will be a continuing one since the plant is self-seeding and many fields are contaminated with it. The six Arkansas lots seized, for example, were grown on fields that had not been seeded since 1956.

Food Poisoning.—Forty-four outbreaks of food poisoning involving 937 persons were investigated. Bakery items produced under insanitary conditions and held without refrigeration were responsible for four outbreaks involving over 200 persons, and crabmeat from an insanitary plant was responsible for the illness of over 50 persons. The crabmeat plant discontinued operations and the case has been filed in Federal court.

Canned seafood was suspected in five outbreaks of food poisoning; canned foods from abnormal cans were implicated in two outbreaks; and canned chicken, subsequently recalled by the Department of Agriculture, was responsible for one outbreak.

Six outbreaks of botulism resulted in the illness of 17 persons and 8 deaths. Home prepared foods were involved in most cases. One outbreak was caused by smoked fresh-water fish prepared commercially in vacuum-packed plastic bags.

After many consumer complaints about red-hot candy jawbreakers, an investigation showed that the mislabeling of oil of capsicum for oil of cinnamon had resulted in the use of 450 times the amount of oil of capsicum intended per batch of jawbreakers. Outstanding stocks were promptly recalled.

Just after the close of the fiscal year, FDA put out a warning on hollandaise sauce contaminated with salmonella organism when a food poisoning outbreak was traced by California State officials to this product.

To Keep Food Clean

Approximately 77 percent of the food seizures and 90 percent of the criminal actions against violative shippers and storers of food were filed on charges of filth and decomposition. Although seizures dropped from 571 in 1960 to 516 in 1961, the number of tons of unfit food seized increased from 6,898 tons to 8,109 tons, respectively. More than half of the filth seizures involved food that became unfit after interstate shipment.

In addition, owners voluntarily destroyed 20,726 tons of unfit food in 1,519 operations or converted it to suitable non-food use. These actions, which resulted from FDA inspections disclosing merchandise that would be subject to seizure if distributed, were conducted under the observation of Federal or local inspectors.

Twenty-seven criminal actions were filed against 53 warehouses, wholesale groceries, and their owners and operators for storage of food under insanitary conditions that resulted in filth contamination. Penalties in 17 cases terminated during the year ranged from nominal fines, with probationary periods, to \$4,600 assessed against a wholesale grocery and one of its partners. The defendants had received small fines and a severe lecture from the court in a case tried on similar charges in 1958; since the second action they have spent more than \$7,000 in an effort to eliminate objectionable conditions. Many of the other concerns prosecuted for insanitary storage of food have also been taking corrective measures to provide protection to the food stored in their establishments.

Sixty-four other criminal actions were filed against manufacturers or shippers of unfit food and 25 cases terminated during the year were based on preparation of food under insanitary conditions or use of unfit ingredients. With these notable exceptions, continued sanitary improvement was found in most plants. A major exception was a bakery which a judge, in sentencing operating partners to fines and short jail terms, pronounced was operated under the dirtiest conditions he had had before him in 10 years.

Bacteriological standards have been used in enforcement activities on nut meats and crabmeat for many years. A regulatory program was adopted in fiscal year 1961 for frozen precooked foods. It is designed to improve the overall sanitation of manufacturing plants preparing the growing number of frozen foods that are consumed with little or no heating.

Two court actions were taken against operators of frozen food plants found during inspections to be operating under grossly insanitary conditions. One firm and its owners were permanently enjoined from shipping precooked frozen seafood until the plant is cleaned, rodent- and insect-proofed, all foods on the premises are

destroyed or denatured, and a sanitary program—including the hiring of expert personnel—is established. The second case was based on violation of a 5-year probation ordered in 1957 by the owner of a precooked frozen food plant. When inspections in September 1960 showed that the plant was currently being operated under filthy conditions and was shipping filthy frozen foods, the judge ordered the defendant to get out of the food business within 30 days or serve a jail sentence.

Table 1.—*Actions on foods during the fiscal year 1961*

Projects	Seizures	Criminal prosecutions instituted	Injunction petitions
Total.....	707	106	11
Beverages and beverage materials.....	8	3	—
Bakery, ready to eat cereal, and macaroni products.....	14	22	1
Cereals and grain products:			
Human use.....	139	14	6
Animal use.....	9	3	—
Chocolates, sugars, and related products.....	25	4	1
Dairy products:			
Butter and churning cream.....	17	10	—
Cheese and other dairy products.....	9	0	1
Eggs and egg products.....	27	6	—
Flavors, spices, and condiments.....	16	1	—
Fruits and fruit products.....	61	1	1
Meat products and poultry.....	11	0	—
Nuts and nut products.....	59	0	—
Oils, fats, and oleomargarine.....	6	1	—
Seafood.....	62	4	1
Vegetables and vegetable products.....	106	9	—
Miscellaneous foods (mixed lots).....	4	1	—
Warehouse foods.....	112	27	—
Foods for special dietary uses ¹	9	0	—
Food adjuncts.....	13	0	—

¹ Includes vitamin products intended as food supplements.

Increased surveillance during cold weather months resulted in the seizure or voluntary destruction of a larger quantity of decomposed fish in New England than in previous years. This is attributed to longer periods the vessels are at sea in winter and the cutting of costs by using less ice. Detentions of whitefish at Great Lakes ports because of cyst infections were also higher than in any recent year. The self-policing plan of the canned salmon industry in the Pacific Northwest generally affords the public protection from unfit canned salmon, but FDA surveillance over these voluntary operations needs to be maintained. A series of inspections of one cannery turned up grossly insanitary conditions and practices. Shipments of its canned and frozen salmon were seized.

The racket of diversion of incubator reject eggs to food channels has been discussed in previous reports. The last of the organized ring of rotten egg dealers which operated seven frozen-egg packing firms was sentenced in January. Also in January, an undercover egg-break-

ing and freezing operation using incubator-reject eggs was uncovered in New Jersey by State health and police officers and Federal Justice Department and FDA men who were cooperating in investigation of the counterfeit drug racket. All eggs on hand were placed under supervision of State sanitarians and the building was padlocked. In April, Delaware police and U.S. marshals apprehended a truckload of incubator rejects enroute from Maryland to New York City food plants. Six new criminal prosecution cases were filed during the year charging traffic in decomposed eggs in various parts of the country.

Sampling of rail and truck shipments of bulk wheat was expanded during the fiscal year to obtain more uniform coverage of wheat moving from the largest producing States. Seizures of rodent contaminated bulk wheat increased from 27 actions against 1,395 tons in 1960 to 53 actions against 2,249 tons in 1961. An additional 150 tons of insect-infested wheat were seized in 2 actions. While these increases reflect increased regulatory attention they also attest to the need for a continuance of the Clean Grain Program.

Inspection of country elevators and terminal grain storage facilities is continuing. Six injunctions were requested; two were granted and four were held without court order being filed pending correction of insanitary conditions and elimination of contaminated grain.

This regulatory pressure, coupled with educational programs in cooperation with the U.S. Departments of Agriculture and Interior, State officials and agricultural colleges, county agents, and industry groups, has raised the general level of grain quality and helped provide the consumer cleaner wheat products.

Four seizures, involving 988 tons of malting barley were made because of insect or rodent filth, or both, and storage under insanitary conditions. Another seized shipment consigned to breweries consisted of 55 tons of brewers rice contaminated by rodents and insects and prepared under insanitary conditions.

A major survey of the sanitary quality of cocoa beans offered for importation was made by the examination of 6,000 samples from 32 producing countries. Based upon the facts obtained, importation requirements that had been in effect since 1933 were raised to permit not more than a 6 percent total of moldy or insect-infested beans, but not more than 3 percent of either. Under the previous requirement, shipments containing up to 10 percent moldy and wormy beans, but not more than 5 percent moldy, have been allowed to enter the country. The new tolerance will go into effect February 22, 1963. This will allow producing countries time to make necessary adjustments in their grading systems.

Pocketbook Protection

Continued reports of short-weight packages, or packages on which the required label information was "hidden" by small print or other device, led to an extensive survey beginning late in June. Each of the 18 field districts collected and examined samples and the results were reported weekly to be compiled later into a 5-week report to serve as the basis for regulatory actions.

During the year, 18 products were seized on short-weight charges. These included coffee, bakery products, confectionery, seafood, condiments, and peas. A prosecution case, started in 1960 against a creamery which was deliberately making short-weight butter, resulted in a fine of \$500 against the firm.

While a Congressional committee was investigating industry practices relative to short-weight and other types of deceptive packaging, a Federal court for the second time ruled against the Government in a case involving candy in what FDA charged was a deceptive container. (See Court Interpretations.)

In another case FDA charged, among other things, that the package of a shortening product was misleading. The product was labeled "made by a revolutionary new process that actually whips out calories." The only difference between the old and the new product was that the new had been "fluffed up" with 22 percent nitrogen gas so that a cupful actually contained less shortening. The package was misleading because the 1-pound can familiar to consumers held only 14 ounces of the new product and the 3-pound can held only 2 pounds 10 ounces.

Swiss cheese into which eyes were cut to give the appearance of a more expensive grade was seized on charges of concealment of inferiority.

In cheats where the debasement is deliberate the adulterators often use surreptitious means to avoid detection. FDA laboratory analysts found that a "pure orange juice" product was adulterated with sugar and water. FDA inspectors visited the plant many times but never were able to locate the sugar because the plant was either shut down or it was packing pure orange juice. Finally the inspectors rented an apartment which overlooked the plant and nearby sheds, and by using binoculars observed an unmarked truck pulling up to a shed. The operators carried sugar from the truck into the shed then began a sort of bucket brigade in which the sugar was carried into the plant. The inspectors' telephoto lens recorded the maneuvers. Conviction of the firm resulted in fines totaling \$20,000, suspended jail sentences with long probations for three of the firm's principals, and a 6-month jail term to be served by one defendant. The defendants also con-

sented to an injunction. The case further led to another indictment of three defendants for perjury.

In other economic cheats where cheaper ingredients than the labels led the purchaser to expect were added, one firm and its president were fined a total of \$1,500 for adding salt to monosodium glutamate, and another firm was fined \$1,000 for shipping black pepper adulterated with ground buckwheat hulls and packing the product short weight.

One firm was placed on a 1-year probation and another fined \$100 for selling colored oleomargarine labeled as butter. Two firms were fined \$400; one shipped oysters containing excessive water, and the other shipped cottonseed meal deficient in protein and containing an excess of fiber. A cooking oil labeled as containing 25 percent pure olive oil was seized on charges that it contained little or no olive oil but a blend of cheaper oils, and another purporting to be corn oil was actually cottonseed oil. An industry complaint led to the seizure of grouper fish which were substituted for the more expensive red snapper. Other seizures included "pure" sorghum sirup which was blended with invert sugar sirup, "pure" vanilla in which imitation vanilla was added, and sauerkraut which contained excessive brine.

Among the products seized for failure to comply with official standards were butter that was low in milk fat; cheese that was high in moisture and made from unpasteurized milk; nonfat dry milk solids in which sodium caseinate was added; evaporated milk with vitamin D omitted; tuna that was below standard for fill of container—it also contained bone pieces and scales; canned apricots, beans, peas, tomatoes, and peaches which fell below standards of identity, quality, or fill; and enriched flour deficient in enrichment and failing to bear mandatory labeling information as to its vitamin and mineral properties.

Foods for Special Dietary Purposes

Within the year 900-calorie diet products for weight control have expanded into sales exceeding \$100 million a year. FDA collected and examined 90 samples which resulted in seizures from 6 manufacturers. Two actions were based on low protein content and other deviations from the declared ingredients. Four were based on charges of misleading dietary representations and unwarranted claims. Other actions against so-called dietary products are discussed with misbranded drugs because of their promotion for therapeutic uses.

DRUGS AND DEVICES

Recalls.—Forty-nine defective or misbranded drugs were recalled by manufacturers during the year, either on their own initiative or at the request of FDA. Twenty-six were defective because of such things as low potency, high moisture, nonsterility, off-flavor and odor, and gas pressure that caused bottles to explode. Fourteen of the recalls were made because of improper labeling resulting from label mixups or absence of declared ingredients. Eight were shipped without clearance through antibiotic or new-drug requirements. For only one product recalled had FDA received injury reports: it consisted of eye drops that caused immediate unfavorable reaction. Patients recovered within 1 to 2 days after discontinuance of the medication.

Illegal Sales of Prescription Drugs

Illegal sale of dangerous drugs and their diversion into bootleg channels continue to be a serious problem. Most frequently involved are the amphetamine drugs. Abusive use of these drugs may cause highway deaths, mental and physical deterioration, juvenile delinquency, and crime.

Of 144 criminal cases terminated during the year on charges of illegal sales, 78 involved unlicensed outlets, such as truckstops, cafes, and peddlers, some of whom operated on a wholesale basis. Sixty-two were based on sales by drugstores or licensed pharmacists without prescription. Three physicians were involved in sales without a bona fide doctor-patient relationship, and in another case, involving use of drugs in reducing treatments in a beauty parlor, a "doctor front" was used.

Fourteen unlicensed individuals and three pharmacists were required to serve prison sentences ranging from 10 days to 4 years. Thirty-four others received jail sentences which were suspended on condition that illegal sales be discontinued. Many of the defendants fined were also placed on probation.

Amphetamines are followed by the barbiturates in the drugs most often involved in both bootleg and unauthorized pharmacy sales. Other medicines sometimes sold originally or on refilled prescription in pharmacies without authorization of a physician are tranquilizers, hormone preparations, antibiotics, sulfonamides, and thyroid.

New criminal cases filed during the year numbered 137. Particular attention was given to investigating the primary points of diversion from legitimate channels to bootleg distribution of these dangerous drugs. In a criminal case pending at the end of the year, Federal and State investigators found that a North Carolina wholesale druggist had purchased and illegally distributed about 6 million units of

drugs, largely amphetamines, within the past 3 years. It was estimated that this would supply all of the drugstores of the State with their legitimate needs for 12 years.

In an attempt to apprehend as many of the big-time operators as possible, simultaneous arrests were made in various judicial districts. In one case where 8 criminal cases were brought in 4 Southeastern States, 15 individuals forming a syndicate were charged with conspiracy as well as direct sales of dangerous drugs. Jail sentences of 2½ and 1 years have been imposed on two of the conspirators and the remaining were awaiting trial at the end of the year. At the time of the arrest, about 122,000 drug tablets were found in the trunk of one of their cars and seized.

Counterfeit Drugs

Counterfeit drugs present a potential hazard. The genuine drugs they imitate are usually expensive new drugs often prescribed for serious illnesses. The genuine drugs are manufactured under new-drug safety clearances that take into account the rigid manufacturing controls that will be exercised. The counterfeit drugs are not made under these control procedures, and may or may not be of standard potency. Some of the counterfeits seized had been transported in unlabeled paper bags, and later delivered in unlabeled bottles, a situation lending itself to dangerous mixups.

Tablet dies and punches with the monogram of the original manufacturer are closely copied, and in some cases authentic ones have been stolen for use in duplicating drug tablet faces. The imitations are often so close that the spurious tablets can be distinguished only by microscopic examination and chemical analysis.

Drug counterfeiting has been a recurrent problem through the years and is now one of increasing intensity. In the early 50's a counterfeit racket in imitation hormone tablets was broken up by criminal and seizure actions. Efforts to control counterfeiting were renewed in the late 50's and two more drug counterfeiters were convicted in 1959.

In the summer of 1960 an investigation began to develop evidence of suspected large-scale distribution of counterfeits of well-known trademarked drugs. New Jersey State officials and the Department of Justice cooperated in the investigation. Most of the counterfeits whose origin has thus far been determined have been linked with a New Jersey drug firm which was charged in a 24-count information filed in March with shipping counterfeit prescription drugs. A Long Island firm and eight individuals were included in the charges. All 10 were charged with conspiracy to violate the Food, Drug, and Cos-

metic Act. Among the individuals were a Texas druggist and his son who were also indicted for shipments from Houston, Tex., and for bootleg sales from an automobile in two Louisiana cities. These cases have not yet been tried. Separate criminal cases charging counterfeiting were filed against 10 other individuals and 5 firms. Nine seizures were made of counterfeit drugs in retail drugstores.

It is hoped that the backbone of the major counterfeit racket in the country has been broken by the 1961 actions, but constant vigilance must be maintained. Druggists have been urged in FDA press releases and in their own association bulletin to accept drugs only in the original, sealed manufacturer's packaging, and to do business only with reputable firms whose representatives they know and respect.

Repacked Physicians' Samples

Another situation inviting mixups and mislabeling is a mushrooming business in repacking physicians' samples and prescription drugs collected from physicians and drug salesmen. Hundreds of thousands of samples initially prepared for distribution to physicians are involved.

The repackers frequently destroy the essential labeling, such as "Caution: Federal law prohibits dispensing without prescription," the common or usual name of the drugs, the identifying lot or control number, and the name and address of the manufacturer, packer, or distributor. New drugs or antibiotics requiring official FDA release before distribution are frequently involved. Some who do the repacking are wholly untrained people. FDA investigators uncovered two serious mixups where potent drugs had been substituted for milder ones named on the labels. The seizure program initiated in mid-June was expanding rapidly at the end of the fiscal year.

False and Misleading Claims

The last remaining major source of the discredited Hoxsey cancer treatment, which has been discussed in many previous reports, was eliminated by a Federal court order in September. The decree against Harry M. Hoxsey, the original promoter, called for "complete and final discontinuation," and a supplementary decree ordered him to cease sharing the profits of his former clinic in Texas which he had been leasing for 50 percent of the profits, for continued use of his cancer treatment. Another decree ordered the lessors to stop permanently the sale of the Hoxsey medications. It is estimated that cancer patients or those who feared they had cancer, paid over \$10 million for the worthless treatment since its inception, including 10 years of almost continuous litigation.

A rapid halt was brought to the revival of the worthless Koch injection, a product sold until the midforties to unorthodox medical practitioners for the treatment of cancer patients. Its originator left the country after two long criminal trials terminated in mistrials. In November, a seizure of the injection equipment and promotional literature was made in possession of an unlicensed chiropractor who was operating a treatment clinic and a mail-order business in do-it-yourself injection kits. Use of such equipment by untrained persons would endanger their very lives. A temporary injunction was granted but by January it was necessary to bring a criminal contempt action for continued distribution. The defendant was fined and sentenced to jail. The penalties were suspended and he was placed on probation for 2 years on condition that he not violate the permanent injunction simultaneously ordered by the court.

A worthless arthritis "remedy" was forced off the market in March 1961 after 7 years of litigation by a permanent injunction in February prohibiting the introduction into interstate commerce of Tri-Wonda or any similar article claiming usefulness in treating or relieving any form of arthritis or rheumatism or their symptoms. Court action against the product began in 1953 with a seizure action. In 1954, FDA requested an injunction. This was granted in 1958, but permitted continued distribution of the product under label representations objectionable to FDA. On appeal, the circuit court ruled for the Government and remanded the case for further proceedings.

This protracted case illustrates the difficulty of providing prompt and adequate consumer protection and the need for more effective public education in this field, where laymen are not capable of self-diagnosis or proper treatment. The Arthritis and Rheumatism Foundation estimates that a quarter of a billion dollars is spent annually on falsely promoted "remedies" for these diseases.

Seizures of vitamins and dietary supplements claiming to be effective in curing or preventing almost every type of serious disease conditions included large bulk lots and literature from mail-order houses. One consisted of 26 mail sacks containing more than 1,000 individual parcel post shipments labeled for the treatment of 32 physical and mental conditions. It was also falsely claimed that each capsule was nutritionally equivalent to milk, meat, eggs, vegetables, and other foods that would have totaled 30 pounds. Another mail-order house shipment consisted of 7 million capsules misbranded with claims for circulatory, nervous, digestive, and mental ailments, damaged liver, as well as resistance to infection, sound teeth, nerves, bones, and muscles. In common with most of the vitamin and mineral products seized, "vim and vigor" was also promised.

Vitamin seizures included products of some of the large firms whose products had traditionally been legally labeled but who had succumbed to the financial lure of the exaggerated claim for prevention or treatment of serious diseases.

The 1960 report mentioned seizures of Honegar, a combination of honey and vinegar, launched through a big publicity campaign revolving around the popular interest in a book called "Folk Medicine" in which a New England physician attributed great healing powers to the product. In another seizure of this product, made in August, 700 copies of this best-seller book were seized on charges that it constituted false and misleading labeling because it was displayed near the product. The court permitted the claimant to take the Honegar involved in the first seizure out under bond and relabel it to bring it into compliance with the law; the claimant posted a bond but has not attempted to salvage the product. Several other seizures of honey and vinegar, separate or mixed, were based on promotional tie-ins with the folk medicine book.

Although medical authorities long ago concluded that there are no health benefits to be obtained by adding sea water to the diet, a wave of sea water products appeared on the market during the year, labeled with cure-all claims. Distribution was stimulated by a series of syndicated articles by a physician claiming that sea salt added to the diet would benefit such conditions as colds, middle-age diseases, diabetes, grey hair, baldness, multiple sclerosis, etc. He attributed the rejuvenation of his 97-year-old father-in-law to sea salt.

Concentrations of both Atlantic and Pacific sea water were seized, as well as sea salt. Ordinarily such products swindle the purchasers and threaten the health of those using them for treating conditions that should have medical care. Direct injuries were caused to a cardiac patient who developed a serious edema after taking sea salt for several days for pernicious anemia and cataracts, and to her husband whose ankles started swelling after using some of the salt for rheumatism.

Multiple seizures were made of a number of brands of the ocean water products accompanied by reprints of the syndicated articles. Some concentrates sold for \$3.75 a gallon, others for \$1.95 a pint, and one brand of sea salt for \$1.50 a pound. One of the articles reprinted and distributed with Atlantic ocean water promised that "by taking a little sea water per day, we can offer our glands a 'chemical smorgasbord.' Figuratively, therefore, the pancreas, liver and spleen, bone marrow, thyroid, adrenals and other organs can march around this chemical smorgasbord helping themselves to whatever they require to produce the manufactured secretions that guard your health."

An injunction recommended to the Department of Justice in May 1961 to restrain one of the largest producers from distribution of misbranded Sea Brine resulted in a temporary decree early in June.

Another drug injunction restrained a self-styled health and nutrition expert from offering various foods as treatments for serious disease conditions to persons who attended his lectures. Many promoters, aware of FDA activity in this area, go to extreme length to disguise their claims in subtle statements still designed to sell their wares to the gullible on the basis of curing the ill and making well people feel even better.

Promoters have more opportunity in house-to-house sales of making direct curative claims for "health foods" than do public lecturers. One agent for pills and capsules containing such ingredients as alfalfa, watercress, parsley, wheat germ, mint leaves, beets, buckwheat, yeast, rose hips, rice polishings, oyster- and egg-shells, clay, unsaturated fatty and amino acids, in addition to vitamins and minerals, was convicted for claims in her home sales talk that the products were of value in the treatment of arthritis, high blood pressure, heart disease, goiter, etc. The defendant had even tried to persuade an FDA Inspector to become a distributor, and described to him in glowing terms the profits he could make.

These are examples of several types of promotion of worthless supplements for serious diseases. In all, 145 seizures of such items and medicines misbranded with direct false and misleading claims were made, in addition to many others which were charged to be inadequately labeled because they did not furnish directions in the labeling for uses for which they were promoted by other means.

Substandard Drugs

The 55 drug seizures made on charges of failure to meet official or labeled standards of composition included 34 subpotent vitamin and nutritional items, 8 drugs for human use, and 13 veterinary drugs and medicated feeds. Other substandard drugs, removed from the market by manufacturers' recalls, are reported earlier in this section.

Devices

Devices seized included 45 charged to be misbranded and 19 to be adulterated because of defects. The defective items were 17 shipments of rubber prophylactics with holes, one of nonsterile bandages, and one of clinical thermometers that did not register accurately.

Among the misbranded devices were 14 consignments of air purifiers, filters, and humidifiers with claims not only to improve the air but also to ward off various diseases, including respiratory ailments, asthma, sinusitis, hay fever and other allergies; and to screen out air-

borne bacteria and viruses. One also was promoted with claims for the lowering of high blood pressure, and another for preventing diphtheria, smallpox, measles, anthrax, and tuberculosis.

Nine of the devices seized were massagers, vibrators, and "passive exercisers" promising weight reduction, figure control, toning of the muscles, and elimination of wrinkles. Many also were promoted with misleading claims for the relief of arthritis and bursitis aches and pains. A tenth seizure of a massager was a vibrator for the gums, with claims for preventing loosening of the teeth, pyorrhea, and the promotion of strong health. Thirty contour chairs were seized for labeling suggesting their effectiveness in the treatment of arthritis, cardiac maladies, acute infectious diseases, nervous exhaustion, and other serious conditions.

Among the other devices misbranded with false curative claims were "electronic" and "frequency" instruments to give pulsations when applied by pads to the patients' bodies; porous clay discs to be used to add natural cosmic rays to water for consumption by man and beast; and bracelets to convert thermal energy into electric energy. All of these were seriously misbranded through diagnostic or curative claims, or both, for a variety of diseases but worthless for any medical purpose. One of the "frequency" instruments was claimed to devitalize "micro-living organisms detrimental to mankind" and thus overcome cancer, colds, ulcers, cataract, glaucoma, tuberculosis, bubonic plague, polio, and leprosy.

These misbranded devices were innocuous apart from claims that turned people away from competent medical treatment, but a number of others seized were potentially dangerous. One was a head-harness traction device that had caused at least two fatalities from asphyxia due to strangulation. Other users were rescued after they had "blacked out." Another dangerous device was a syringe for the self-administration of insulin on which improper dosage scales were inscribed. An ultrasonic device was seized in possession of a beauty parlor operator who intended to use it to treat arthritis. This is a prescription device that could cause serious injury when operated by untrained persons. Also potentially dangerous were breast "rejuvenators" employing hydro massage.

New Drugs

During the fiscal year 463 new drug applications were received, 201 of which were for veterinary drugs. Within this period 223 applications became effective including 68 for veterinary drugs. Favorable action was taken also on 931 supplemental applications which included 145 for veterinary drugs. Five effective applications were suspended without issuance of notice of hearing and with the consent

of the distributors. One administrative hearing was held to determine whether or not an application should be suspended; the decision is still pending. No drugs were changed from prescription to over-the-counter labeling.

Among new products introduced were six drugs for mental conditions; an injection for pre-anesthetic sedation and one to stimulate depressed respiration; two antibiotics, one useful for systemic infections caused by gram-negative bacteria and some gastrointestinal infections, and one for *Candida* infections of the vagina; three anti-inflammatory steroids, two for topical use in skin conditions, and one for oral use; a steroid to reverse wasting processes and to promote tissue building and weight gain; a diuretic for the treatment of edemas; two drugs to depress cough; five drugs for gastrointestinal conditions, three which reduce spasm and stomach acid recommended for the treatment of peptic ulcer, one for diarrhea, and one to control vomiting; an appetite depressant; a remedy for pinworms; an enzyme taken by mouth to treat various inflammatory conditions; an antithyroid drug; a drug for the treatment of arthritic conditions; two new antihistamines; a hormone preparation to counteract overdosage of insulin; a drug for the treatment of high blood pressure; two skin antiseptics and two for fungal infections of the skin; a pain-relieving drug; an anticancer drug useful for the palliation of Hodgkin's disease; a drug for tuberculosis; and one for treating certain types of epilepsy.

Veterinary drugs cleared included a coccidiostat for chickens; injectable iron preparations for swine to correct iron deficiency anemias, a considerable economic problem in the past decade; an antibiotic combination of oleandomycin and oxytetracycline in animal feeds as growth promotants; and, for use in chicken feeds, the antibiotic hygromycin, which is effective against three species of internal parasites that cause considerable economic loss in meat and egg production.

COSMETICS AND COLORS

Discovery on the market of eyebrow pencils containing synthetic organic (coal-tar) colors which are banned under the law and had not been encountered for many years led to an urgent collection and testing program by FDA's inspectional and analytical staffs. Within a month in the spring of 1961, about 2,000 samples of pencils, refills, and cores were tested and more than 900,000 were seized. Nearly every major cosmetic house immediately recalled outstanding stocks, since 95 percent of the pencils on the market contained cores manufactured by a single firm that had turned to the use of nonpermitted colors. This firm notified all customers to withdraw from the market

all shades involved, for replacement, and within a short period all retail stocks contained permitted colors only. FDA inspectors witnessed the voluntary destruction of several million eye pencils and cores.

Serious eye injuries that had occurred before cosmetics were brought under Federal control in 1938 had led to the banning of coal-tar colors in cosmetics to be used in the area of the eye. The first seizures under the 1938 law—made within 3 weeks of its enactment—were of eyelash and brow dyes containing the potentially injurious colors.

Another cosmetic recall removed from the market a shampoo containing a chemical that was dangerous to eye mucosa.

Other cosmetics seized were lipsticks falsely claimed to contain colors derived from raspberries and beets and to contain no coal-tar colors; a fingernail corrective and beautifier; dusting powder claimed to contain milk solids from Tyrolean goats, the secret of "life-giving nourishment"; and a consignment on the Brooklyn docks contaminated by polluted harbor water during hurricane Donna. Also seized were 2,000 pairs of hosiery with claims to beautify the legs; labeling indicated that they contained turtle and mink oils, royal jelly, lanolin, and a secret formula.

A number of other misbranded cosmetics were seized on charges that they violated the drug provisions of the law by promising corrective treatment for acne, skin regeneration, healing poison oak, altering body circulation, etc.

CERTIFICATION SERVICES

Color additives.—All color additives used in foods, drugs, and cosmetics (except hair dyes) must be from batches certified by FDA as harmless. In 1961, 5,844 batches representing over 4,092 tons were certified, and 35 batches representing 16 tons were rejected.

Insulin.—All batches of insulin must be tested and certified before distribution. Examination of 343 samples resulted in the certification of 279 batches of insulin drugs and 61 batches of materials for use in making insulin-containing drugs. One trial mixture of protamine zinc insulin was not approved because it did not meet the requirements for a satisfactory biological reaction test.

Antibiotics.—The predistribution testing and certification of certain antibiotics also is provided for by amendments to the act. Examinations were made of 12,937 batches of penicillin, tetracycline, chlortetracycline, bacitracin, chloramphenicol, streptomycin, dihydrostreptomycin, neomycin, novobiocin, nystatin, oleandomycin, triacetyl-oleandomycin, polymyxin, erythromycin, amphotericin B, and paromomycin intended for commercial distribution. The last nine antibiotics are not included in the certification amendments, but are tested

when they are mixed with those requiring certification. One hundred and fifteen batches were found unsatisfactory by either FDA or the manufacturer for failing to meet the following standards: potency (48), moisture (35), pH (9), high streptomycin content (8), sterility (7), pyrogens (5), melting point (2), and syringeability (1). An additional 16 batches were refused certification when factory inspectional evidence indicated that the samples submitted were not representative of the batches.

Other Government agencies submitted 475 batches of antibiotic preparations for potency testing before extending their expiration dates. In addition, 222 dairy samples were tested for content of antibiotics and 75 antibiotic medicated feeds were tested for labeled potency.

During the last quarter of the fiscal year, provisions were made for the certification of antibiotic sensitivity discs which are used to aid physicians in choosing the best drug to treat specific infections. Of the 207 batches tested, 41 were rejected for failure to meet potency and uniformity standards.

Enforcement of Other Acts

A total of 107,029,133 pounds of tea was examined under the Tea Importation Act, a drop of more than 7 million pounds below last year's imports. Rejections amounted to 232,050 pounds for failure to measure up to the standards set by the U.S. Board of Tea Experts. Four rejections were appealed to the U.S. Board of Tea Appeals, but the decision of the FDA examiner was upheld in all four cases.

A bowl cleaner was seized because the word "poison" on the label was in smaller type than that required by the Caustic Poison Act.

No actions were taken under the Filled Milk Act; one application under the Import Milk Act is pending a report from Canadian officials as to sanitary practices and tuberculin certification of the herds.

No court actions were taken under the Federal Hazardous Substances Labeling Act, since this was a preparatory year for surveys of the scope the program should cover, regulation formulation, and educational activities. It is estimated that 5,000 to 8,000 manufacturers produce about 300,000 household items falling within the definitions of the act.

Civil Defense

Eleven civil defense positions were financed by funds appropriated for the Office of Civil Defense and Mobilization.

The Biological Warfare Research Program proceeded beyond the planning stage which was developed in fiscal year 1960 to study the

vulnerability of wholesale packages of foods and drugs to bacteriological agents which may be introduced by an enemy during overt or covert attacks, and to devise simple procedures for decontamination of affected products. Biological warfare stimulants were used in a specially equipped laboratory on food packaging materials to test the effects. Preliminary studies were undertaken with two stimulants.

FDA started conducting studies using biological warfare agents in food products. Decontamination studies in this project are underway. Fluorescent antibody antisera for detecting certain biological warfare agents in food were prepared and studies to develop detection techniques were begun.

A project was set up to determine the amount of contamination of an average total diet caused by fallout of radioactive materials. The normal diet of a 19-year-old boy is being used as the test diet because it represents the largest customary food intake for this purpose (19-year-old boys eat more than any other comparable group in the population). Samples are being collected from four food stores in the metropolitan Washington area during 2-week periods and the food is being analyzed for radioactive material. The tests will be made quarterly for a year and may be extended later to other parts of the country.

The FDA Civil Defense Training Program for Federal, State, and local food and drug officials and industry food officials, which was reactivated in 1960, was expanded to include individual courses for each group. A radiological monitoring course for Department of Health, Education, and Welfare personnel was initiated. A total of 1,033 persons attended the 33 training courses which were given in 27 cities. These courses showed the effects of radiological, chemical, and biological agents on food and drugs, monitoring techniques, procedures for testing exposed food and drugs, and methods of decontamination or destruction of contaminated food and drugs. The industry course was directed toward problems that must be solved by a specific food industry in case of enemy attack.

New Court Interpretations

The Court of Appeals for the Second Circuit held that the reach of the Federal Food, Drug, and Cosmetic Act extends to an oil blend made from individual oils received in interstate commerce, even though the final blend was sold only within the State where prepared.

This reversed a lower court decision that the mixed oils were no longer subject to the Federal law and that such situations could be dealt with adequately under State laws.

The blended oil was labeled as containing 25 percent olive oil, but actually contained little or none. The individual oils making up the blend were properly labeled when shipped.

The appellate court decision interprets the law most favorably from the standpoint of maximum consumer protection.

The same court in another case upheld the authority of the Secretary of Health, Education, and Welfare to cancel previously issued certificates of harmlessness of batches of coal-tar colors when new evidence showed that the colors were not in fact harmless.

In another case related to the point regarding the reach of the Federal law, the District Court for the Eastern District of Michigan held that a drug product sold locally but manufactured from ingredients received in interstate commerce was subject to Federal jurisdiction. In its opinion the court stated: "The Supreme Court has warned against creating 'loopholes' at the expense of public protection, through restrictive or technical constructions of the Act."

In the fourth court contest of the section of the law that holds a product to be misbranded "if its package is so made, formed or filled as to be misleading," the District Court of New Jersey again ruled against the Government. The case involved chocolate mints, in a package with hollow ends and dividers. The mints occupied only 44 percent of the total volume of the package, and only 75 percent of its practical volume.

The Court of Appeals for the Third Circuit held that the district court had not made sufficient findings to support its ruling, and remanded the case with instruction to the trial court that it might find that even though the package may lead the purchaser to think it contains more than it actually does, the form and fill of the package are justified to protect the product from breakage, taking into account alternative packaging methods available. The district court was told that the deception could only be justified by findings that the effectiveness of the package in protecting the contents outweighs its deceptive quality, and that the available alternative effective packages are no less deceptive.

The district court again ruled that the product was not misbranded, and that the usefulness of the package, both from the standpoint of protecting the contents and of economy of manufacture, outweighs its deceptive quality.

The Government has not decided whether to appeal the case again as this report goes to press.

In a decision interpreting the specific prohibition in the law against non-nutritive substances in confectionery, a Federal court in California held that saccharine and sodium cyclamate were not non-nutritive substances of the type which Congress intended to bar.

The Food and Drug Administration had charged that a shipment of "low-calorie" candy was adulterated because it contained these artificial sweeteners which are considered non-nutritive from the dietary point of view. The court based its interpretation on legislative history of the section of the law involved, showing that primary concern at the time was to ban dangerous trinkets and other harmful and inedible substances in candy.

The U.S. District Court of Kansas dismissed a case against a grain elevator when the Government was unable to supply the defendant with a portion of the samples on which the case was based. The Government charged that the elevator was operating under insanitary conditions.

The Government took the position that inability to furnish the samples did not affect jurisdiction since the case was based on conditions found in the plant. The court held that the defendant was entitled to portions of the Government's samples in order to prepare his defense, and that failure to produce them prejudiced his substantive rights.

In a case involving decomposed brazil nuts, the District Court for the Northern District of Georgia ruled that it was not necessary for the Secretary to fix tolerances in order to enforce the prohibition against decomposition in foods.

The Court of Appeals for the Fifth Circuit ruled that it is not necessary to allege actual contamination or a "reasonable probability" of contamination in order to seek an injunction against careless use of rodenticide 1080 in food warehouses by an exterminator firm. The appellate court held that what the Government was required to allege was that there was reasonable *possibility* that the rodenticide would contaminate the food. The case was referred back to the District Court for the Northern District of Texas for further proceedings. (The appellate decision occurred after the close of the fiscal year.)

Changes in the Law and Regulations

The Color Additive Amendments to the Food, Drug, and Cosmetic Act and the Federal Hazardous Substances Labeling Act, both enacted on July 12, 1960, were discussed in the previous report. On April 7, 1961, Public Law 87-19 was enacted, providing time extensions for uses of food additives until not beyond June 30, 1964, provided that actions to develop scientific data necessary for a food additive order had been commenced before March 6, 1960, and extension until March 5, 1961, had been granted or applications for such extensions were pending on that date. This amendment makes the same provisions for time extension of pesticide tolerances or exemp-

tions under the Nematocide, Plant Regulator, Defoliant, and Desiccant Amendment of 1959.

REGULATIONS

Drugs.—Revisions in regulations will affect the labeling of prescription drugs and devices and FDA's program for inspecting the manufacture of new drugs. These revisions are expected to cause the most sweeping change in labeling, including promotional literature supplied to physicians for potent pharmaceuticals, since the passage of the 1938 act. Promotional literature now must disclose hazards as well as advantages of the drugs and will provide the physician with the full information needed by him for using the drug in his practice. The label of a drug now must give more complete information about its ingredients. A change in the new-drug regulations permits FDA to stop the marketing of a new drug until it has been given an opportunity to make a complete inspection of the methods, facilities, and controls to insure the purity of the drug.

An amendment to the new-drug regulations requires the manufacturer to submit to FDA more samples of the new drug and its ingredients with information concerning tests run so that FDA may check the firm's test procedures for identity, strength, and purity.

A statement of policy limits potassium permanganate preparations to prescription sale because of the public health problem created by its misuse to induce abortion.

A policy statement was published requiring the labeling of drugs given to milk-producing animals to warn against their use in these animals or to specify the time during which milk should be discarded after administration of the drug to avoid food use of milk contaminated with drug residues. Formerly this type of label warning was required only for certain antibiotic preparations.

An amendment to the antibiotic regulations affecting the labeling of chloramphenicol (Chloromycetin) requires greater emphasis on the warnings against its administration in minor infections and the necessity for adequate blood studies when used. The National Research Council confirmed FDA's view that chloramphenicol is a valuable drug, but it can cause serious or even fatal blood disorders and should therefore be administered only in those cases where its use is clearly justified.

Labeling requirements were revised for the certification of human parenteral preparations containing dihydrostreptomycin to require a warning against its use except in patients who cannot tolerate streptomycin, or full doses of it, in the treatment of tuberculosis. Small amounts of dihydrostreptomycin may cause deafness.

An amendment to the regulations for the certification of antibiotic drugs provides for batch certification for safety and efficacy of antibiotic sensitivity discs which are used in determining the drug best suited for the treatment of patients. Evidence showed that discs on the market were unreliable.

The antibiotic regulations added 788 amendments and 13 new monographs.

Food Additives.—Eighty-six new regulations were issued in fiscal year 1961 in accordance with the Food Additives Amendment and provide for both indirect and direct additives. These regulations will serve as models to expedite issuance of future regulations. The regulations proposed in the form of petitions, not all of which are suitable for filing, are now in excess of 500.

Typical of the regulations providing for packaging materials are those which deal with nylon resins, slimicides in paper, polyethylene, and cellophane. Direct additives included resins to be applied on fruits such as limes, lemons, oranges, etc.; modified food starch; a peroxide to be used for flour maturing; and antioxidants to be used in potato granules.

In August 1960 a statement of policy was issued classifying vitamin preparations containing more than 0.4 milligram of folic acid per daily dose as drugs which must be labeled only upon prescription. Folic acid is not itself harmful but it has been known to mask the symptoms of pernicious anemia when used in sufficient quantities. Food supplements containing up to 0.4 milligram of folic acid per daily intake may be marketed temporarily under an extension of the Food Additives Amendment. Larger amounts require specific safety clearance before marketing.

Color Additives.—The Color Additive Amendments of July 12, 1960, provide that for 2½ years after enactment established color additives may be listed provisionally, if consistent with the public health, before the permanent listing is issued. The first provisional regulations were published on October 12, 1960, with subsequent provisional regulations published on October 19, November 5 and 26, and January 10, 1961. These regulations listed most of the coal-tar colors previously certified and also a number of non-coal-tar colors. The provisional listings of external D&C Yellow Nos. 9 and 10 were terminated and their use was prohibited for any purpose. The provisional listing of FD&C Red No. 1 was terminated and a color with its specifications was subsequently listed as Ext. D&C Red No. 15 for use only in external drugs and cosmetics. D&C Orange Nos. 5 and 17; and D&C Red Nos. 8, 9, 10, 11, 12, 13, 19, and 33 were listed provisionally for use in lipsticks (not more than 6 percent by weight of pure dye) and without restrictions for external drugs and cosmetics.

D&C Orange Nos. 3, 4, and 5; and D&C Red Nos. 8, 19, 33, and 37 were listed provisionally for use in drugs taken internally and in other preparations such as mouthwashes and dentifrices, but the amount ingested in 1 day was limited to 0.75 milligram of the pure dye.

On January 24, 1961, proposed definitions and procedural and interpretive regulations were published which clarified the definitions of color additives, provided guidelines for submitting color-additive petitions, prescribed certification procedures, and provided fee schedules. The first color-additive regulation, permitting dried algae meal for use in chicken feeds to enhance the yellow color of chicken skin and eggs, was published on July 1, 1961.

Pesticides.—One hundred thirty-seven pesticide tolerances or exemptions were established for raw agricultural commodities involving 36 pesticide chemicals. Three of these tolerances changed tolerance levels while temporary tolerances were established for 3 pesticides involving 17 commodities. The tolerance for DDT on sweet corn was changed because of the tendency for transfer of DDT residues from canning waste or corn stover used as livestock feed, to milk and meat. Two pesticide chemicals were added to the list of those generally recognized as safe. Since the enactment of the Pesticide Chemicals Amendment, 2,300 tolerances or exemptions have been established for 122 pesticide chemicals.

Six petitions for use of pesticides on 12 crops were withdrawn when it was determined that data were insufficient for reaching a conclusion of safety for residues from the proposed uses.

Plant regulators and nematocides along with defoliant and desiccants were brought under the pesticide amendment through Public Law 86-139. Clearances were given for certain of the regulators and nematocides when their use results in residues on raw agricultural commodities.

Food Standards.—Final definitions and standards of identity were published for ice cream, french ice cream, ice milk, fruit sherbets, and water ices. Some parts of the order were appealed for judicial review, but most of the provisions became effective. The standards were later amended to permit the addition of an emulsifying agent and small amounts of edible oil to enhance smoothness. This established minimum requirements for milk fat and total milk solids and maximum limits on air and water content.

As a result of objections filed to the order setting standards for orange juice and orange juice products, hearings were held and the standards were stayed until interested parties have time to file briefs stating their objections.

Food standards were amended to permit the use of corn sirup, glucose, and dried forms of these sirups in canned sweetpotatoes; the

addition of traces of specified calcium salts to canned lima beans, and of stannous chloride to canned asparagus; the use of oxystearin in salad oil to inhibit crystallization, and of hydroxypropyl methylcellulose as an emulsifying ingredient in french and salad dressings; the addition of acetone-peroxides as bleaching and maturing agents in flour and of sodium aluminum phosphate, an acid-reacting ingredient, in self-rising flours; the use of an oxidizing ingredient, calcium iodate, and of calcium stearyl-2-lactylate in bread; and the addition of propylene glycol alginate in cream and neufchatel cheeses.

Hazardous Substances.—Proposed general regulations for the Federal Hazardous Substances Labeling Act, enacted in July 1960, were published April 29, 1961. A 60-day period was given in which to receive comments on these proposals; final regulations were published August 12, 1961. They list special warnings required for certain products. For example, carbon tetrachloride and methyl alcohol must be labeled "DANGER," and "POISON," and bear the skull and crossbones symbol. In addition, carbon tetrachloride labels must bear the statements "May be fatal if inhaled and swallowed," and "Avoid contact with flame or hot surface." Methyl alcohol must be labeled "Vapor harmful," "May be fatal if swallowed," and "Cannot be made nonpoisonous." Specific warnings also are given in the regulations for turpentine and petroleum distillates, and ethylene glycol and diethylene glycol. The regulations specify the placement and typography of signal words and statements of hazards.

To give manufacturers adequate time to label their products in compliance with the law and final regulations, order No. 1 extended the penalty and condemnation provisions of the act until August 31, 1961; order No. 2 extended this date to February 1, 1962, the maximum time allowed by the act. Since the act itself contained definitions for "HIGHLY TOXIC" based on animal tests, and definitions for "EXTREMELY FLAMMABLE" and "FLAMMABLE" (except for extremely flammable and flammable solids and self-pressurized containers) based on a physical test involving the flashpoint of the substance, the penalty and condemnation provisions for such substances became effective on February 1, 1961.

Scientific Investigations

Successful regulatory action would not be possible without reliable scientific information to serve as evidence of violations. The work of the seven laboratory divisions that comprise the Bureau of Biological and Physical Sciences helps form the foundation on which enforcement of the law is based.

The analytical problems which the scientists of the Food and Drug Administration must solve have increased in number and complexity as advances in the technology of producing and distributing foods, drugs, and cosmetics introduce new chemicals and processing techniques. Some of these problems could scarcely be solved by conventional procedures and apparatus; however, new and ingenious instruments have been developed and have proved remarkably successful in detecting and identifying minute quantities of material. Their relatively high cost is more than balanced by the speed with which reliable results are obtained, and the consequent saving in man-hours of routine analytical work.

Gas chromatography, for example, has been applied to the identification of aromatic diamines in dyes; to the separation of fatty acids, whose presence in food in large quantities is usually a sign of decomposition; to the classification of the chick edema factor as a chlorinated organic substance; and to the detection of adulteration of commercial oils with inferior oils. In studies of adulterated peanut oil, gas chromatography has detected the presence of other oils, and the study is now being extended to include positive identification of the adulterants. Similarly, in a survey of commercial margarines purported to have been made from corn oil (a "low-cholesterol" substance), gas chromatography was used to distinguish between corn oil products and those made from cottonseed oil. Refined techniques are being developed to detect and identify the substances that emerge from the gas chromatographic apparatus to improve the sensitivity of the test and increase the speed of analysis even further.

The substitution of cheaper species of fish in large lots of fish used in the manufacture of fish sticks and similar prepared foods is a practice which has been suspected for many years, but difficult to prove. Such adulteration can now be detected by separation and identification of characteristic fish proteins through starch gel zone electrophoresis. Analyses by this technique have been used successfully as evidence in regulatory actions.

The X-ray fluorescence apparatus, by which small quantities of elements of higher atomic weights can be measured, has been used to determine heavy metals in inorganic dyes and zirconium in cosmetic creams. The basic apparatus has been modified to record data automatically for more rapid and accurate measurement.

Other examples of advanced instrumentation are the use of polarography to analyze drugs and to study the effects of light on pesticide residues; the use of fluorescence measurements to detect the presence of polynuclear hydrocarbons in foods and to differentiate between vitamin D₂ and vitamin D₃; employment of a new instrument, the micro-

goniometer, for study of surface active agents in the separation of insect fragments from food; and adaptation of an older instrument, the tensiometer, to measure surface and interfacial tensions between liquids in the detection of filth in foods and drugs.

The infrared spectrophotometer has been used alone and in combination with other techniques to show the presence of petroleum hydrocarbon resins in foods and to analyze minute quantities of certain mixtures of sulfonamides, barbiturates, and adrenocortical steroids. A project has been initiated to record the infrared absorption spectra of all U.S.P. and N.F. Reference Standards. The published spectra will be of great value to all investigators who need to identify unknown drug substances, and will give further insight into the relationships between the spectra and the chemical structures of the drugs.

Many studies have been carried out by the use of established chemical and biological techniques. The effects of combinations of antibiotics on staphylococcus were compared to the effect of the single antibiotic, for example. Twelve strains of staphylococcus that were resistant to penicillin and to erythromycin separately proved to be inhibited by extremely small concentrations of mixtures of the two. A new semi-synthetic penicillin, 2,6-dimethoxyphenyl penicillin, was observed to kill strains of staphylococcus resistant to most forms of penicillin. Apparently the enzyme elaborated by staphylococcus, which counteracts the action of most penicillins, attacks the new penicillin only very slowly.

Special microscopic techniques have been developed to identify drug tablets by manufacturer, and many cases of counterfeiting have been exposed as a consequence. The technique has been greatly refined and a special microscope accessory stage has been developed for use in these investigations.

In continued studies of the chick edema factor, a newly developed assay, more sensitive than previous methods, was used to test fats from the market to determine whether the toxic factor was present in commercial fat derivatives for food use. Another toxic principle has been observed to occur in fatty acids, and is under investigation.

Related to this problem is the investigation of the presence of toxic products in heated fats. The toxic products are chiefly unusual materials that do not form adducts with urea, which is a characteristic of normal fatty acids; to determine the nature of these substances, the urea filtrate containing the nonadducting materials is fractionated into groups and the composition of each group is determined. Other studies on food fats deal with their general nutritional properties, effects on blood cholesterol, caloric availability, and effects on oxidative metabolism.

A test procedure has been designed to assess the nutritional adequacy of the so-called 900-calorie diets discussed in the section Foods for Special Dietary Uses. The unique feature of the procedure is the use of a high-fat diet for growing rats in the attempt to simulate the metabolic condition of an obese person who is in the process of losing weight. One-third of the caloric intake of the rat is derived from the test product; the other two-thirds is fat, corresponding to the human's average loss of half a pound per day.

The problem created by the use of *crotalaria* as a green manure crop is discussed in the section Potential Health Hazards. These seeds cause destruction of the liver, and edema in the lungs. As little as 0.015 percent of seeds, equivalent to about 3-4 seeds per pound of grain, has proved lethal to rats. Current work is designed to define exactly the toxic response to the alkaloid monocrotaline, derived from the seeds, to develop analytical methods for determining contamination in grain products, and to study the distribution of the alkaloid in tissues of treated animals.

The study of antibiotic residues in milk continues. Two methods for determining penicillin in milk, the rapid disc assay for field use and the so-called overnight plate assay, were compared in analyses of unknown samples. The overnight plate assay, although not as rapid, is about 10 times more sensitive. The occurrence and persistence of dihydrostreptomycin, neomycin, bacitracin, polymixin, and erythromycin in milk as a result of treatment of cows for mastitis are being investigated and the effects of a number of variables and interferences are being evaluated.

The conventional method of testing antibiotics for contaminants by addition of the antibiotic to a sterile growth medium has been improved by separating the contaminant from the antibiotic material through filtration. Methods proposed for the assay of very small amounts of bacitracin in feed have been evaluated and improved.

Research has been initiated to determine whether colorants produce toxic derivatives when they are subjected to the conditions of normal food processing. The effect of heat on typical organic dyes has been investigated, and several of the decomposition products of these dyes have been isolated and identified. Similarly, the chemical reactions between selected colorants and food constituents, including common food additives, have been studied.

Additional work on food additives included evaluation of methods proposed by the manufacturers for such substances as migrants from packaging material and food container closures. Attempts were made to measure migration by use of a solvent scheme that simulates actual food conditions. The physiological effects of food additives under a variety of nutrient conditions were studied by the use of tissue culture, bacterial cells, and animal tests. An investigation was made of

arsenicals in feeds with respect to methodology, migration of the arsenical from the feed into the portions of the animal used for food, and the fate of arsenic after it enters the body.

Studies of decomposition in fish included the effects of chlortetracycline in the ice in which the fish are packed. The determination of carbonyls, purines, and trimethylamine has been investigated as a possible index of decomposition in fish.

A collaborative study was made of a method for caffeine in beverages in which interfering substances (principally carbon dioxide) are eliminated and the final determination is made by ultraviolet spectrophotometry. Improved methods were developed to determine safrole, a weak carcinogen formerly used in flavorings.

Efforts toward the development of specific and accurate methods of analysis for organic phosphorus pesticides continue. Paper chromatography, measurements of organic phosphorus and organic sulfur, and infrared absorption are all under trial. Bioassay with fruit flies and brine shrimp as test animals can be used for semi-specific evidence of the presence of these and other types of pesticides; more precise identification generally depends on paper chromatography.

A more sensitive method for 3-amino-1,2,4-triazole has been developed. This method detects the metabolites of the herbicide as well as the parent compound; it is still uncertain whether the metabolites are equally toxic.

A review of methods for identifying animal hairs in food and drug products resulted in a better technique of mounting the hairs for examination and a more satisfactory explanation of structural differences in hairs from different animals. The method for determining filth in import cheese has been improved by providing for histological differentiation of plant material so that the filth can be related to its source.

A serological procedure for identifying staphylococcus enterotoxin and a rapid method for growing concentrated relatively pure toxin for antisera will be used to develop methods for determining the enterotoxin in foods. A survey of the extent of contamination of raw whole milk intended for use in manufacture showed that 83 percent of the 1,195 samples examined contained staphylococci, although only 10.3 percent contained more than 100,000 viable staphylococci per milliliter. Studies were also made of the temperatures best suited for isolation of coli and the presence of botulinus toxin in packaged smoked fish.

Microbiological methods for the B vitamins and amino acids have been improved by changes in the basal medium for vitamin B₁₂ and by the greater precision achieved through using absorbance, rather than percent transmittance, in measuring the response of organisms.

Investigations of the composition of several new synthetic adrenocortical steroids revealed the presence of contaminating substances. Paper chromatographic procedures to detect these contaminants have been adopted as limiting tests for impurities in several monographs of the U.S. Pharmacopeia. Analytical methods have been perfected for the assay of many drug preparations, including solanaceous, curare, and ergot alkaloids; estrogenic hormones; and several antihistaminics.

Thyroid preparations on the market have recently been encountered which appeared to be therapeutically inactive, even though they met the U.S.P. requirements. The official assay method depends on the chemical determination of organic iodine. Controlled animal tests for biological potency confirmed the suspected deficiency in therapeutic effect. The biological assay for these preparations is extremely slow and time consuming. Efforts are being made to develop more rapid biological methods, and more specific chemical assays.

Toxicity experiments have shown that FD&C Red No. 1 produces liver damage and liver tumors, and on this basis the authorized use of this dye was denied recently. Further study has revealed that the animal body produces phenols, aromatic amines, and aromatic acids in the metabolic breakdown of FD&C Red No. 1, and an attempt is being made to determine which of these detoxification products are chiefly responsible for the toxicity of the dye.

In the Bureau of Medicine, as a part of the medical evaluation of hazardous substances and development of the medical aspects of their labeling, basic clinical and technical information is being collected from and exchanged with other Federal and interested private organizations.

Hospitals reporting on adverse drug reactions increased from 12 to 35 during the year; they include some of the most prominent centers in the country. While the program is still small, the groundwork is being established for a badly needed national repository of drug reaction information. Significant individual case reports point up the need for more informative labeling of some drugs for safe use.

The clinical evaluation of various medical devices was initiated during the year under contract for studies to establish the falsity of extravagant claims. Seizure of a number of air purifying devices was the first result of this new program.

In the second year of the Government Industry Cooperative Oyster Research Program analysis was completed of the extensive chemical and biological data compiled earlier. Statistical methods were applied to the field and laboratory data collected. The objective of the study is to develop a sound basis for the formulation of enforceable standards to prevent excess water in shucked oysters.

Enforcement Statistics

The year's activities included 26,276 inspections of factories and warehouses; 3,669 inspections of pesticide practices; 4,045 of public eating places to check on the notification of the serving of oleomargarine; 199 inspections involving illegal sales of prescription drugs; 88 for radioactivity in foods; 56 of speaker and lecturer activities; 790 to check on manufacture of color additives; and 491 inspections of firms making or handling hazardous household substances. Of 44,466 domestic samples collected, 26,028 were foods, 15,860 drugs and devices, 2,483 cosmetics and colors, and 95 miscellaneous.

In the 202 criminal actions terminated (or terminated for some defendants) in the Federal courts during 1961, fines assessed totaled \$138,118. Jail sentences ranging from 10 days to 6 years were imposed in 53 cases involving 63 defendants. Twenty-one individuals were required to serve imposed sentences, averaging 10 months; sentences were suspended for 42 on condition that violative practices be discontinued. Records of actions terminated in the courts were published in 1,010 notices of judgment.

Table 2.—Number of samples on which criminal prosecutions and seizures were based and number of court actions instituted during the fiscal year 1961

Item	Total		Criminal prosecutions instituted		Seizures accomplished		Injunctions requested
	Violative samples	Actions	Violative samples ¹	Actions	Violative samples	Actions	
Total.....	3,543	1,326	1,483	269	2,060	1,038	19
Foods.....	1,501	824	420	106	1,081	707	11
Drugs and devices.....	1,923	475	1,063	163	860	304	8
Cosmetics (colors).....	117	26	-----	-----	117	26	-----
Caustic poisons.....	2	1	-----	-----	2	1	-----

¹ The number of samples on which the actions are based always exceeds the number of actions; in seizures a variety of articles may be contained in a single shipment, while in criminal actions each sample usually represents a single shipment which forms one count of action.

A regulatory report inevitably deals at some length with the activities of the minority—the ignorant, the heedless, and the greedy—who violate the requirements of the law to the detriment of both consumers and ethical manufacturers. However, progress in consumer protection is best reflected by the vast number and proportion of producers and handlers whose products are in compliance with the law. In the final analysis, it is the responsibility of the public to be vigilant and sensitive to consumer protection needs, and to see that its laws and their administration are consistent with those needs.

Table 3.—*Import samples collected, examinations made, and lots detained during the fiscal year 1961*

Item	Samples collected	Examina- tions made	Lots detained
Total	14, 502	16, 422	5, 077
Foods	11, 051	15, 731	2, 715
Drugs and devices	3, 261	533	2, 286
Cosmetics, colors, miscellaneous	190	158	76

Conclusion

Nineteen sixty-one was a year of definite progress in carrying out the mission of the Food and Drug Administration to protect consumers.

Drug counterfeiting was investigated vigorously and actions begun against major operators; a campaign was begun to stop abuses in repackaging of physicians' samples; two major quack remedies—one for cancer and one for arthritis and rheumatism—were finally put off the market after several years of court action on each; a major ring of packers of incubator-reject eggs was broken; a major drive was begun against short-weight packages and concealment of label information required by law to be conspicuous. Regulations were tightened to assure that doctors and druggists are fully informed about the hazards as well as the potential benefits of new drugs. The Food and Drug Administration staff continued to grow, and construction of the new headquarters laboratory building got underway.

But the unfinished business at year's end left no room for complacency. Still in the tooling-up stage for full administration were the new Food Additives and Color Additive Amendments, and the Federal Hazardous Substances Labeling Act.

Approximately 99.7 percent of all shipments of fresh produce moving to market were still untested for possibly harmful amounts of pesticide residues. The full impact of resumption of nuclear weapons testing by the Soviet Union on the safety of our food supply remains to be seen. Food and drug manufacturing and distributing establishments were being inspected on an average of only once every 3 years. And experience has shown numerous gaps in consumer protection that can only be closed by further amendments to the law.

Much has been accomplished, but the problems have changed and the challenges are as great as ever.

Office of Vocational Rehabilitation

Rehabilitations of Disabled Persons Grow in Number as Research, Training, and Facilities Expand

IN THE FISCAL YEAR that ended June 30, 1961,¹ another new high was reached in the number of disabled persons who were helped to overcome their handicaps and placed in satisfactory employment through the services of their State rehabilitation agencies. The 1961 total of persons rehabilitated through the State-Federal program was 92,500, almost five percent more than the year before.

Despite a generally high level of unemployment during 1961, the placement of 92,500 handicapped workers in jobs for which they were prepared through the public program of vocational rehabilitation is a large step toward the ultimate goal of the national program—provision of opportunity for all handicapped persons to make the most of their abilities.

1961 was a year in which there was a great amount of progress—and an even greater amount of consolidation of previous gains—in the three basic elements which do most to move the national rehabilitation program forward: Research and demonstration; a training program producing more and better qualified workers in the disciplines whose principles contribute to the art of rehabilitating disabled persons; and the addition of rehabilitation centers, workshops, and other facilities, where new rehabilitation knowledge can be applied with greater effectiveness.

These advances were a high point in the march of vocational rehabilitation into the nation's pattern of health and welfare activities.

The State-Federal relationship for aid to the disabled began in 1920. In four decades it has progressed from training designed primarily for vocational objectives into services under a greatly expanded philosophy which holds that before vocational training is attempted

¹ Unless otherwise indicated, all subsequent references to 1961 will be to the fiscal year, that is to say, the period between July 1, 1960, and June 30, 1961.

disabilities should first be removed or reduced; that disabled persons be aided in adjusting, if need be, to new sets of circumstances in their personal lives; and that rehabilitation services should be both more personalized and more comprehensive.

There were several legislative actions along the way as experience was gained, and as rehabilitation began to be viewed as a part of the national health program, and a measure having economic as well as social importance. Rehabilitation of the disabled was included as part of the social security laws of the early thirties; mental troubles were recognized as targets for rehabilitative measures, and physical restoration was added as a program objective in the Barden-LaFollette amendments of 1943; and the State-Federal partnership was given a sounder financial base and improved resources for bringing disabled persons to productive employment in Public Law 565, enacted in 1954.

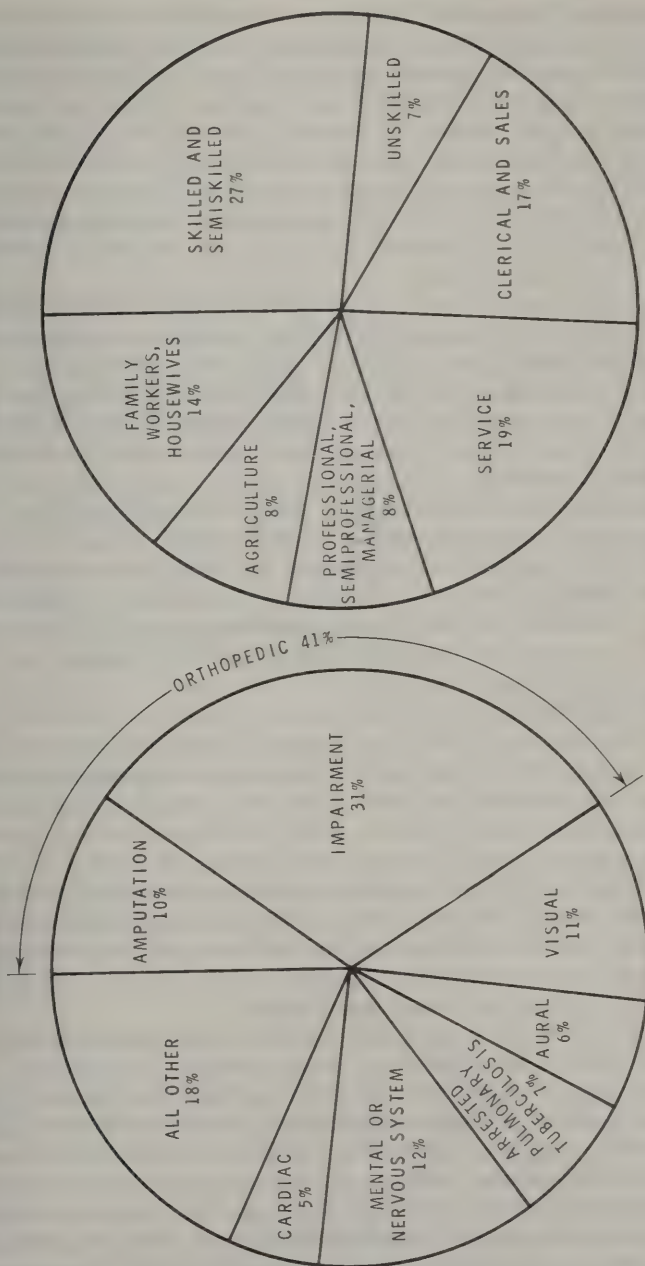
Since 1954, advances have come more swiftly. The more severe disabilities are under harder attack. State rehabilitation agencies and private groups are concentrating on the effects of mental illness and retardation as handicaps to employment; communities are participating to a greater extent in activities for helping their disabled and a dynamic program of research is pouring new riches of information into the public knowledge.

The research and demonstration program expanded in every way in 1961. There were 116 projects approved for action during the year, approximately a quarter of the total of 460 for which grants have been made since the first award in 1955. The geographical spread among project locations has grown from the 8 States and the District of Columbia where the initial 18 projects of 1955 were located, to 48 States, the District of Columbia, Puerto Rico and the Virgin Islands. Expenditures for the 18 projects of 1955 amounted to less than \$300,000. Grants for the 116 projects of 1961, and for continuation of prior projects amounted to \$8.17 million. This brought the Federal investment in rehabilitation research and demonstration to approximately \$26 million.

The training program grew in several directions. A significant action was a series of institutes, for which the Office of Vocational Rehabilitation contributed support, that brought organized labor and community agencies into closer relationships with State rehabilitation agencies, for ultimate benefits to handicapped or industrially injured workers.

There was renewed response within the training program to the need for more social workers to cope with the impact of disability on individuals, families, and communities. There was a study of professional preparation in speech pathology and audiology, and ini-

CHART 1.—DISABILITIES AND MAJOR OCCUPATIONAL GROUPS



Percent of rehabilitants, by types of disability at acceptance and by major occupational group at closure, fiscal year 1961

tial planning for academic training to prepare persons for modern rehabilitative work with deaf persons. There were special training activities to prepare instructors for teaching the blind to get about with greater facility, and for other objectives. There was renewed emphasis on the training of counselors, which, next to the funds granted in support of instruction in rehabilitation medicine, received the most financial support. Forty schools of medicine and osteopathic medicine—almost half the total of such schools—received training grant funds in 1961 for instruction of undergraduate medical students in rehabilitation principles.

The approximate level of construction of rehabilitation facilities that has spurred the progress of rehabilitation in recent years was maintained during the year. Two more States were added to the list of those that own and operate rehabilitation facilities for their own particular objectives. Seven States are now in this category—Virginia, West Virginia, Pennsylvania, Iowa, Kansas, North Carolina, and Arkansas.

The 36 projects for construction of rehabilitation facilities that were approved during the year for partial support from the Federal government through the Hill-Burton Act—which was amended in 1954 to include rehabilitation facilities in its provisions—brought the total of facilities built with that support to a total of 176, a good indication of surging community interest in rehabilitation.

REHABILITATIONS IN 1961

The new record in the number of persons rehabilitated into employment—5 percent more than in the previous year—reflected gains in a majority of the States, and in the District of Columbia, Puerto Rico, and Guam.

The preponderance of these persons continued to be those with orthopedic disabilities—amputations and other crippling conditions. About 41 percent (38,000) were disabled by such conditions, and, of these, about three-fifths resulted from accidental injuries, about one-fifth were from poliomyelitis, osteomyelitis, or arthritis, and the remainder from other orthopedic impairments.

Referrals came from many sources, but the largest proportion (34 percent) came from physicians, health agencies, or hospitals. Another 14 percent was referred by public welfare agencies, and 7 percent by State employment service offices. About 12 percent applied for services on their own initiative. The remainder came from such sources as educational institutions, employers, and unions. Nearly half of the rehabilitants had dependents, and 63 percent were male.

The occupations in which rehabilitants of 1961 were placed included nearly all types of work, including more than 4 percent who went into such short-supply professions as teaching, engineering, and medicine.

The proportions employed in other major occupational groups remain similar to those in previous years—skilled and semiskilled, 27 percent; clerical and sales, 17 percent; service workers, 19 percent; family workers and housewives, 14 percent; professional, semiprofessional, and managerial, 8 percent; agriculture, 8 percent; and unskilled, 7 percent.

At the close of the fiscal year, 197,000 other disabled people were receiving services from State rehabilitation agencies, against a total of 180,000 in 1960.

ECONOMIC VALUE OF THE PROGRAM

The extent to which the public vocational rehabilitation program can improve the economic status of handicapped persons, increase the Nation's productive potential, and relieve some of the dependency upon public assistance was strikingly shown in 1961.

About 70,000 of the 92,500 handicapped persons prepared for and placed in employment during 1961 were unemployed when their rehabilitation began. The group that had been working at the time they were accepted for service was earning at a rate of about \$70 million a year and generally the individuals were employed in unsafe, unsuitable, or part-time work. In the first full year of employment for the entire group after rehabilitation, it is estimated that they will have earnings at the rate of \$180 million.

Nearly 18,500 of those who were rehabilitated received public assistance at some time during the process, at the estimated rate of \$18 million a year. The estimated total cost of the rehabilitation of these persons was about \$18 million, a one-time outlay.

It is estimated further that those who were established or placed in employment through the public rehabilitation program will pay, during the remainder of their working lives, from seven to ten dollars in Federal income taxes for every Federal dollar invested in their rehabilitation, so that the conversion of so many persons from tax consumers to taxpayers is of pronounced economic benefit to the Nation.

Research Points Out New Objectives

The general nature of the research and demonstration projects for which the Office made supporting grants during the year revealed some sharpened objectives of the public program which are leading it into new paths.

Rehabilitation research, in the first years after it was initiated under provisions of 1954's Public Law 565, was, in a high proportion, directed toward developing means of assistance that voluntary groups

could give to State rehabilitation agencies, to help them to examine their on-going programs, and to improve their content and method.

The need for such projects continues. Yet, in the increasing number of project proposals submitted to the Office, there is evidence of a much stronger drive toward research into fundamental aspects of disability and rehabilitation. The psychological aspects of disability, the attitudes of communities toward disabled people and those of employers toward hiring them, the adaptation of electronics and powered devices to artificial limbs and sensory aids, the special rehabilitation needs among the growing proportion of older disabled people in the population and among disabled mothers with dependent children, special help for severely disabled persons whose rehabilitation may be beyond the means or facilities of their State agencies—these are examples of the directions in which research and demonstration are leading the program.

In these ways the public program is reaching beyond specific techniques of treating ordinary forms of disability, and has gotten well into an unfolding three-fold set of objectives (1) to direct more attention to the severer forms of disability, (2) to demonstrate in communities that disabilities can be helped more substantially and in better fashion by local application of new techniques and knowledge, and (3) to help communities to establish rehabilitation facilities and services on a sound basis so that they may continue when Federal support is ended.

There are, for example, 83 special demonstration projects over the country for which the Office has given supporting grants so that communities and States may have greater opportunity to apply new knowledge in coping with forms of disability. Nine of them are now operating without Federal aid.

At the end of the year, 460 research and demonstration projects had been completed, or were in operation, or approved for activation. They were about half the number of proposals that have been made to the Office of Vocational Rehabilitation. The approved projects represent a total Federal investment of approximately \$26 million. Fifty-two percent of the grant awards were to private, nonprofit agencies; 31 percent went to colleges or universities; and 17 percent went to public groups, including State rehabilitation agencies, which has been a growing trend in the program.

The selection and approval of projects is through a National Advisory Council of 12 members, a statutory body appointed by the Secretary. The members are leaders in those phases of scientific, educational, and public affairs whose attainments qualify them for responsible judgments on the suitability of research grants for the particular purposes of the national rehabilitation program. Miss

Mary E. Switzer, Director of the Office of Vocational Rehabilitation, is chairman of the Council.

The growing volume of applications for grants brought the necessity during the year for a preliminary screening process within the Office. Many applications propose ventures into areas where ramifications of the many disciplines used in rehabilitation become involved, so that expert opinions in those fields are needed to relate the value of the proposals to rehabilitation objectives.

Within the year, two Study Sections were established. One panel advises the Council on applications involving the psycho-social sciences, and the other gives preliminary consideration to applications concerning sensory disabilities. A third Section, which will consider applications primarily involving medicine, was being established as the year closed.

NEW SERVICES FOR THE SEVERELY DISABLED

A new type of research and demonstration project designed to increase and intensify rehabilitation services for persons with extremely severe disabilities was initiated during the year.

Five of the new kind of projects were put into operation in Massachusetts, Texas, West Virginia, Michigan, and Pennsylvania. They are directed primarily toward services for people receiving disability cash payments under the disability provisions of Old Age, Survivors, and Disability Insurance legislation.

Persons with such disabilities as cardiovascular, neuromuscular, or respiratory conditions are expected to be the chief beneficiaries of the services, extended to them because the severity of their conditions requires intensive and long-term services, generally at high cost, and frequently out of their residence area.

The Federal government will bear part of the costs of these projects, which will include special surgery and other rehabilitative measures not ordinarily available to such disabled persons from their State rehabilitation agencies.

Grants totaling almost \$381,000 were awarded for the projects. Applications have been received from other States for grants to enable the adaptation of these projects as prototypes.

SCIENTIFIC ADVANCES APPLIED TO REHABILITATION

The application of scientific advances and principles to help disabled persons to cope with their handicaps was undertaken at two technological schools during the year. Basic and applied research is being undertaken at the Massachusetts Institute of Technology and at the Case Institute of Technology to discover ways in which electronics, pneumatics, hydraulics, and other sciences may be used for

alleviation of various forms of disability; and to construct devices for practical application of theoretical principles.

A part of this research will be in aids for blind persons. Studies will be made of the probing patterns of blind persons using guide canes, and ways will be sought to improve communication by Braille, including a high-speed machine which can operate at electric typewriter speeds for simultaneous Braille typing.

Case Institute has a project for development of electronic and related equipment capable of guiding a powered prosthetic device through several predetermined patterns. With such a device, a person having a completely paralyzed arm could perform several activities, such as feeding himself and meeting other personal daily needs.

Another project will experiment with a device which will record differences in pressure produced on various parts of the body of a person lying in bed. There is no successful device of the sort available, and its development would greatly benefit physical medicine and rehabilitation by more knowledge of the prevention and cure of "bed sores."

A fourth project will experiment with a tiny electronic device which, when permanently implanted in living tissue, could pick up and transmit nerve impulses, and in return activate an artificial limb or brace.

MENTAL RETARDATION

The widespread interest in mental retardation was accelerated during the year by increased activity in research and demonstrations relating to this disability.

About one in every ten projects approved for activation has been in the field of mental retardation, and cumulative grant funds for projects concerned with social, psychological, and vocational problems of retarded persons rank first in relation to other research areas. In all, 49 projects dealing with mental retardation have been approved since the beginning of the OVR research program. Of these, 20 are research and demonstration and 29 are selected demonstrations—which are occupational training centers to apply on a national basis the new procedures and services that were developed through research.

Heavy emphasis was placed on helping mentally retarded high school students. A project in the Minneapolis public schools is establishing facilities and developing techniques to give vocational guidance, training, and on-the-job experience to mentally retarded youths during their last year of high school. The project will serve as a prototype for extension to other school systems.

A similar project to develop on-the-job work situations for retarded adolescents is in progress in Maryland. New York's rehabilitation

agency is studying the early application of vocational services for retardates in a large urban area, and the Georgia agency is preparing a program to assist its public schools in developing skills and advancing maturity in mentally retarded youths prior to their entering the labor market. There are studies along related lines in Wisconsin, Missouri, and Oklahoma, and a New York project has the purpose of discovering ways in which vocational rehabilitation can be used among emotionally disturbed children who show tendencies toward delinquency.

AID FOR DISABLED MOTHERS

An experimental project which has nationwide implications was initiated in the District of Columbia during the year, designed to aid a category of disability that had been untouched—disabled mothers with dependent children.

The purpose of the project is to prepare disabled mothers who receive public assistance for their children to become self-supporting and to care for their families.

A mother must have a physical, mental, or emotional disturbance to be eligible for these services. With her children, she moves into a training center, where they continue to live until the mother is trained for and placed in employment, and finds a new home.

Physical restoration services, hospital care, and medical treatment are available as required, and instruction is given in personal hygiene, homemaking, and child care. The project is assisted by teachers from public schools, public health nurses, recreation agencies, and the U.S. Employment Service; and the D.C. Department of Public Welfare shares responsibility with the District's Department of Vocational Rehabilitation for the full operation of the endeavor.

MENTAL ILLNESS AND PERSONALITY DISORDERS

The role of the public rehabilitation program in the restoration of the mentally ill to community life and to employment was stressed more than ever during the year.

The final report of the Joint Commission on Mental Illness and Health, "Action for Mental Health," was published during the year. In it was the following statement:

"The objective of modern treatment of persons with major mental illness is to enable the patient to maintain himself in the community in a normal manner. To do so, it is necessary (1) to save the patient from the debilitating effects of institutionalization as much as possible, (2) if the patient requires hospitalization, to return him to home and community life as soon as possible, and (3) thereafter to maintain him in the community as long as possible. Therefore, aftercare and rehabilitation are essential parts of all services to mental patients,

and the various methods of achieving rehabilitation should be integrated in all forms of service, among them day hospitals, night hospitals, aftercare clinics, public health nursing services, foster family care, convalescent nursing homes, rehabilitation centers, work services, and outpatient groups. We recommend that demonstration programs for day and night hospitals and the more flexible use of mental hospital facilities, in the treatment of both the acute and the chronic patient, be encouraged and augmented through institutional, program, and project grants."

The research and demonstration grants that have been approved in the field of mental illness—including 18 during 1961—show a marked parallel to these recommendations. There have been projects concerned with establishing, developing, and improving therapeutic and vocational techniques of the community hospital, such as those at the Vermont State hospital and the Massachusetts Mental Health Center, and in the day hospital at the last-named institution; half-way houses, as in Vermont, and those established during the year in West Virginia, Kentucky, and Missouri; greater use of work therapy, as in mental hospitals in Kentucky, Illinois, and the Goodwill Industries in Fort Worth, Texas; the screening of hospital patients for potential vocational rehabilitation, as is done by the agencies in Arkansas and Georgia; outpatient counseling and rehabilitation aftercare, as is done by the Manhattan Aftercare Clinic and the Butler Health Center, of Providence; and the training and placement of emotionally disturbed persons in eight selected demonstrations.

These projects illustrate a strong trend to weld together in the community a complete series of the services developed and tested in specialized projects. It will eventually be done through well-designed large-scale combined research and demonstration projects which have as a primary objective the logical organization and the controlled testing of cooperation and coordination of existing services of various types, as well as provision of additional services not yet available but needed to complete a basic sequence.

OLDER DISABLED WORKERS AND THE CHRONICALLY ILL

A project previously reported is a "Demonstration of Feasibility of Vocational Rehabilitation of Disabled Persons 60 Years of Age and Older," initiated by the Federation Employment and Guidance Service of New York City. Recent statistics from this project covering the past two years report 406 clients served with a median age of 64, a 75-percent placement rate for clients considered placeable, and a median gross pay of \$44.50 per week (despite many part-time placements) as compared to a median weekly income of less than half this amount from all sources prior to entering the project. More than 60 percent of these older disabled clients had a secondary disability.

In fiscal 1960 this project and its established pattern of services was designated as a prototype around which other agencies could develop similar programs. To date the OVR has provided funds for five additional projects, in as many localities, of this nature. One of these is sponsored by the Kiwanis Opportunity Workshop in Milwaukee, and is a good example of a service organization assisting in meeting the rehabilitation needs of a community. A similar project is being sponsored by the Mankato Rehabilitation Center, Mankato, Minn.

The 1954 amendments to the Social Security Act give State vocational rehabilitation agencies a key role in the cash disability benefits program. It is essential that those responsible for administering such a program have available the best techniques and procedures with which to facilitate the screening of large numbers of applicants for OASI disability benefits.

Recently the OVR approved projects with a university and two rehabilitation facilities, including the Sister Kenny Foundation in Minneapolis, to carry out, simultaneously in three regions, duplicate research programs which will provide quantitative as well as precise information on how the process of evaluation and determination of disability and the rehabilitation potential may be made more efficient.

MOBILE REHABILITATION TEAMS

The Oklahoma Division of Vocational Rehabilitation during the year inaugurated a mobile team of rehabilitation experts which is extending services of the agency to severely disabled persons in their own communities. The project is supported by a research grant, and the results will be evaluated for use in other States, particularly in extension of services to rural areas.

A principal objective of the team is to stimulate community interest in rehabilitation and to create awareness of its potentialities. The team, in its visits, mobilizes all elements of the community that can help with the rehabilitation of disabled persons, and assists local counselors in cases that present special problems.

STUDIES IN DEPRESSED AREAS

A study of the rehabilitation needs of disabled persons residing in economically depressed areas was initiated during the year with a grant to West Virginia's Division of Vocational Rehabilitation.

The project is undertaking to study the prevalence of disability in depressed sections of the State; the need for rehabilitation services among the residents; the drain that unrehabilitated disabled persons are on the community; and the contribution that vocational rehabilitation can make in solving these problems. The project is regarded as a pilot endeavor for guidance of other States.

ALCOHOLISM

There was increasing activity in research relating to alcoholism as a personality disorder, and in several projects there are studies of work therapy and vocational counseling as means of countering alcoholism, and in applying general rehabilitation methods to this disability.

INCREASING EMPLOYMENT FOR DEAF PERSONS

Increased employment opportunities for deaf persons is the goal of three research grants made during the year.

The Michigan Department of Public Health inaugurated a 3-year program to distinguish deaf persons from retarded persons in State training schools to determine whether the major disability is in hearing or retardation. The findings will shape the course of training in communications and in vocational skills.

Another Michigan project is the establishment of a center by the Association for Better Hearing, which will make a 4-year effort to provide special personal adjustment and job training for about 100 deaf men now considered unemployable.

A year-long study is in progress at the University of Pittsburgh to determine the extent that hearing loss caused by nerve impairment destroys the ability to localize sounds. Significant findings in this field could help development of hearing aids of greater use and adaptability.

SELECTED DEMONSTRATIONS IN 1961

The number and geographical spread of selected demonstration projects grew during the year. These projects are in special categories of severe disability, and are now operated in 83 communities in 40 States and the Virgin Islands to utilize new rehabilitation knowledge and methods. The number of projects had doubled since the first was established in 1958. The totals now :

Occupational centers for mentally retarded.....	29
Work classification and evaluation centers for cerebral palsied.....	7
Work adjustment centers for disabled persons with emotional problems....	8
Occupational adjustment services for epileptics.....	2
Services for the homebound :	
Industrial homework.....	3
Vocational adjustment in a community home-care program.....	1
Blind and visually handicapped: Optical aids clinics.....	18
Work evaluation of older disabled workers.....	9
Rehabilitation of the chronically ill.....	2
Services to blind farmers.....	1
Rehabilitation of the mentally ill.....	3
Total.....	83

Medicine and Counseling Are Emphasized in Training Program

1961 was a year of consolidation of the gains of the training program in previous years, rather than one of expansion, for the increase of only \$1,060,000 over the 1960 appropriation permitted comparatively small increases in assistance to educational institutions and scholarship assistance to students preparing for careers in rehabilitation.

Of the \$7,260,000 appropriated for training, grants totaling \$7,253,719 were made. Teaching grants numbered 209, as compared with 201 in 1960. Traineeships were granted for 1,586 students, as compared with 1,460 in the previous year.

Medicine received the largest proportion of support—27 percent of the total granted for long-term training. Rehabilitation counseling was next, with 25 percent of the total. Speech pathology and audiology received 10 percent.

Sixty-two of the 91 State vocational rehabilitation agencies received grants for staff development, largely to assist them in conducting organized in-service training for their staff. OVR funds supported 187 short-term courses which reached nearly 4,000 individuals and 26 persons received rehabilitation research fellowships.

Definite strides have been made in improving the content of instruction in rehabilitation counselor and undergraduate medical student training programs, through the medium of short-term training courses for faculty members. In rehabilitation counseling a workshop on occupational information and job placement was held during the year, supplemented by committee work in eight other aspects of the rehabilitation counseling curriculum.

REHABILITATION COUNSELING

Training programs designed to prepare graduate students for work in State vocational rehabilitation agencies and other community rehabilitation programs received OVR support in 32 universities, with a full-time enrollment of 531. Students receiving OVR traineeships numbered 459 (86 percent). The estimated number of graduates in 1961 was 225, or only 37 percent of the 600 graduates estimated to be needed annually for employment in expanding agencies or as replacements for those leaving the field.

The 1960 study of graduates of the training programs since 1954 indicated that about 800 students had been graduated from rehabilitation counselor training programs. Nearly 80 percent were employed in rehabilitation programs. Eight percent were enrolled in graduate

study. Less than 5 percent were employed in work unrelated to rehabilitation of the disabled.

MEDICINE

Forty of the 87 schools of medicine and osteopathic medicine received teaching grants for instruction of undergraduate medical students in rehabilitation principles. These 40 schools have an enrollment of about 12,830 students, or about 40 percent of the total enrollment.

Traineeships have been awarded to 182 physicians enrolled in residency training programs, chiefly in physical medicine and rehabilitation and to 145 undergraduate medical students interested in a special training experience in research or clinical service in rehabilitation.

OCCUPATIONAL THERAPY

Grants in 1961 were made to 16 of the 31 AMA-approved schools of occupational therapy to permit them to employ additional faculty, to develop new teaching materials, or to strengthen the integration of the classroom courses with the students' clinical experience. OVR traineeships were awarded to 230 students in the basic curricula, or 12 percent of the 1,850 enrolled in the schools in 1960-61.

The graduate traineeship program, initiated in 1960 to produce personnel for teaching positions, gave scholarship assistance to 21 individuals in the 1960-61 academic year.

A training grant for the instruction of occupational therapists in psychiatric aspects of rehabilitation was awarded to the University of Pennsylvania's School of Occupational Therapy. A grant also was made to the American Occupational Therapy Association to support partially the services of a psychiatric occupational therapy consultant to schools and clinics.

A pilot program of recruitment in New York City will serve as a demonstration for other communities and other schools. Its contacts with schools and colleges throughout New York and New England, plus a summer work experience in occupational therapy departments of hospitals for selected students, have increased the number of applicants for admission.

PHYSICAL THERAPY

Teaching grants were made to 22 of the 40 AMA approved schools of physical therapy, chiefly for expansion of the faculty. Schools are experiencing difficulty in recruiting students, chiefly because of lack of scholarship assistance for the 4-year training program plus the clinical affiliation.

Shortages of qualified teachers had impelled OVR to institute grants for graduate traineeships in 1959. In the 1960-61 academic year 20 individuals were enrolled in graduate training programs, the majority in anatomy, physiology, and physical therapy. The majority of those who completed graduate study in the previous year are teachers.

PROSTHETICS AND ORTHOTICS

Seven educational institutions received a total of \$607,483 in 1961 to enable them to employ faculty for a series of short-term training courses in prosthetics (artificial limbs) and orthotics (braces and assistive devices). During the year these short-term courses reached over 600 physicians, surgeons, rehabilitation counselors, therapists, prosthetists, orthotists, and other personnel concerned with procurement of prosthetic devices.

PSYCHOLOGY

The need for trained psychologists with particular competence in serving physically disabled persons, especially in the area of psychological assessment of the potential for rehabilitation in severely handicapped persons, is being met. In 1961, grants were made to 5 universities interested in strengthening the rehabilitation content of basic curricula for all psychology students. Traineeships were awarded to 23 students specializing in rehabilitation at the graduate level.

SOCIAL WORK

OVR training grants have stimulated an increased awareness of the impact of physical and mental disabilities not only on individuals, but on families and communities as well. Several new training units for social work are now operating in State agencies, the most recent in the Rhode Island State agency. Establishment of these units indicates a growing recognition of the importance of social components in the rehabilitation process by State Directors and Regional Representatives, and has strengthened the relationships between the schools of social work and the staffs of the State agencies and Regional offices.

Teaching grants were made to 33 schools of social work with a total enrollment of 3,164. Traineeships reached 138 students in the first and second years of the curricula. Estimates of the number of trained social workers needed for work in health and rehabilitation agencies are about 1,500 annually, so that OVR is contributing less than 4 percent of the needed graduates in the health and rehabilitation aspects of social work.

SPEECH PATHOLOGY AND AUDIOLOGY

A study of professional preparation in speech pathology and audiology was completed in 1961. Its findings have provided a valuable base for planning the future direction that training grants in this field should take. Conducted under the auspices of the American Speech and Hearing Association, the Office of Education, Children's Bureau, and OVR, the study undertook to define both status and needs for training in this field. In the 1960-61 academic year 777 students received graduate degrees, about half of the 1,500 graduates estimated to be needed annually for rehabilitation of persons with communication disorders.

Teaching grants were made to 26 of the 193 training centers offering graduate training, and traineeships were awarded for 173 trainees.

Initial planning for a new academic training program designed to prepare persons for modern rehabilitative work with the deaf has been completed and recruitment is under way for the 1961-62 academic year, as a cooperative enterprise of San Fernando Valley State College and the John Tracy Clinic in Los Angeles.

Eight short-term training courses on social, economic, and personal problems of deaf persons have been held for audiologists, psychologists, clergymen, social workers, rehabilitation counselors, and other persons serving the deaf.

Slightly over \$80,000 has been granted in this field in 1961.

WORKERS FOR THE BLIND

About 5 percent of the total appropriation for training in 1961 has been devoted to preparation of personnel for rehabilitation of blind persons.

Two academic programs for instructors in mobility (independent travel) have been established. Boston College will graduate its first class in August; Western Michigan will probably accept its first students in 1961-62.

Short-term training courses have been conducted in a number of significant aspects of service to blind persons. They have included courses on psychological aspects of blindness, supervision of vending stand programs, casework services, interagency cooperation, and placement of blind persons in competitive industry.

SHORT-TERM TRAINING COURSES

Continuous educational programs for practitioners in all professional fields in 1961 included 187 short-term courses reaching nearly 3,500 individuals. Some courses dealt with rehabilitation of amputees, services to the deaf, blind, and mentally retarded, rehabilitation of the mentally ill, and treatment of organic voice problems.

Others were concerned with orientation of newly employed rehabilitation counselors, or with raising the level of skill of administrators, supervisors, and medical personnel of State vocational rehabilitation agencies.

LABOR'S INCREASING SUPPORT OF REHABILITATION

Four regional demonstration institutes have been held for personnel of State vocational rehabilitation agencies, rehabilitation centers, State Councils of AFL-CIO and other key community agencies. The institutes, held under the sponsorship of the National Institute of Rehabilitation and Labor Health Services, served to increase the knowledge of rehabilitation on the part of labor leaders and to stimulate interest in further cooperation on behalf of handicapped or industrially injured workers.

Rehabilitation Facilities Grow in Number

Increasing utilization of rehabilitation medicine has led many more hospitals to request Federal assistance in establishing rehabilitation facilities as part of their program.

The facilities are of many kinds, ranging from comprehensive rehabilitation centers—some of which are located in the leading teaching and research institutions in the country—to sheltered workshops which furnish transitional employment to severely disabled persons gradually returning to full employability in competitive industry. There are also smaller special purpose facilities such as half-way houses and speech and hearing centers.

Fifty-eight State agencies now have a regulatory basis for establishing rehabilitation facilities with regular program funds or Federal grants for extension and improvement of their programs. A third of the States have enabling legislation allowed them to provide services for independent living for disabled persons, as distinguished from vocational rehabilitation, if Federal funds become available for the purpose. One State has ventured into this endeavor without Federal assistance.

In 1961, 32 States spent a total of \$1.7 million of their own and Federal funds for facilities and workshops, the Federal share amounting to \$1.2 million.

STATE-OPERATED FACILITIES

At the beginning of the fiscal year, five State rehabilitation agencies operated facilities designed to provide vocational training and other services especially needed by their rehabilitation clients. Now there are seven.

The Office of Vocational Rehabilitation and the Surgeon General of the Public Health Service approved 36 community projects during the year for the construction of rehabilitation facilities under Hill-Burton legislation. The total cost will be \$19,122,205. The Federal share amounts to \$7,159,013.

Since 1954, 176 such facilities in 50 States have been approved. They cost a total of \$123,603,912, in which the Federal government participated to the extent of \$37,607,059. Of the 176 projects, 61 were sponsored by nonprofit hospitals, 44 by State-owned hospitals, 4 by city or county hospitals, and 67 by nonprofit organizations other than hospitals. Of the 176, 129 were to serve a variety of disabled people. Thirty-one were for mentally retarded or emotionally disturbed cases, five for deaf and hard of hearing, four for blind persons, and seven for others with special problems.

Counteraction in Isolation of Deaf Persons

A basic need in the rehabilitation of deaf persons is to reduce their isolation so that they may take greater part in local and national community activities. Interaction for this purpose among national, State, and local groups was inaugurated at an OVR-supported national meeting attended by some 50 leaders in work for the deaf, some themselves deaf and others who could hear, where the groundwork was laid for nationwide efforts to foster dynamic programs for those with hearing loss.

A similar result, but with a different approach, is being sought through religious groups, to spur the vocational rehabilitation of deaf persons within their congregations. Clergy and lay workers have for many years worked with deaf persons in spiritual, social, and vocational affairs. An OVR effort to direct these activities into wider and more productive channels came in 1961 in Washington, D.C., with a pilot workshop supported by the Office for priests, nuns, seminarians, and lay workers of the Catholic church, to acquaint them with their State agencies and the program of vocational rehabilitation. The workshop was so productive that similar ones are planned within other denominations.

NEW STUDIES IN BLINDNESS

The vocational placement of blind persons was given substantial aid during the year by a wide study of well over 400 blind workers in professional fields. The study was made by Pennsylvania's Office for the Blind, with the aid of a grant from the Office of Vocational

Rehabilitation, and covered workers in 42 States, the District of Columbia and Puerto Rico.

Direct interviews were held with blind lawyers, judges, scientists, engineers, teachers, social workers, psychologists, and mathematicians, and were recorded on tape and transcribed. The compendium of material that came out of the study, showing how these blind persons function practically and successfully in their jobs, is a highly useful document in the placement of blind persons.

There also was action during the year to bring into the programs for the blind the benefits of invention and of scientific advances, particularly in electronics. The research project under way at the Massachusetts Institute of Technology, to find ways to apply new scientific principles to the reduction of disability, is of great interest to blind persons and those who work with them. The principal area of concern for the blind in this project is in finding ways to improve the ability to read, to move about with greater ease and safety, and interpretation of sensory cues, such as traffic sounds.

Another study of considerable importance to blind persons and their instructors was completed during the year. The American Association of Workers for the Blind, with the aid of an OVR grant, made an analysis of the functions and duties of home teachers of blind persons. The teachers—a large proportion of them blind—are now receiving reports of the study, which contain advice and suggestions from physical and occupational therapists, social workers, persons in various public health activities, and others who are acquainted with the special problems of home instruction of the blind.

Since the Office of Vocational Rehabilitation has had resources available for research and demonstration projects, 38 projects concerned with blindness have been supported by grants. In addition, there are 11 low-vision clinics where highly skilled personnel teach the use of optical aids to persons whose residual vision is so low that they are considered as blind.

Shortage of trained personnel offers a particularly serious problem. In addition to other kinds of training, the Office of Vocational Rehabilitation instituted a course for supervisors of vending stand operators through the training facilities of Harbridge House.

The vending stand program for the blind continued to set new records. At the end of the fiscal year a total of 2,174 stands operated by blind persons had been reached. Six hundred fifty-six of them were on Federal property, and the rest on State, local, or private property. Some, operated in such places as national parks, were seasonal.

The stands had a gross business of \$42,057,398 or \$3,838,058 more than the year before; they returned \$8,460,727 in net profits to 2,332 operators; and the average profit for all operators was \$3,936.

OASDI APPLICANTS

Disability provisions of the Social Security Act, which provide insurance protection for workers against loss of income due to disabling injury and disease, hold as an equally important objective the rehabilitation of as many as possible of those who apply for disability benefits, the primary purpose being to return them to productive employment.

State agencies (all but four of which are State vocational rehabilitation agencies) made approximately 365,000 initial determinations of disability of applicants applying for disability insurance benefits in 1961. About 400,000 applicants were screened for rehabilitation potential, and more than 40,000 were accepted for possible rehabilitation services.

During 1960, 4,200 applicants were enabled to return to work through the provision of rehabilitation services.

Efforts to develop new and improved methods to serve these applicants are being carried out through several research and demonstration projects. Three projects concerned with evaluating the extent of disability of applicants and assessing the rehabilitation potential were initiated. Five others are designed to demonstrate how many of the severely disabled applicants can be rehabilitated through concentrated and intensive medical, therapeutic and counseling services.

Medical Training

One of the acute needs in the public program of vocational rehabilitation is for physicians trained in the modern practice of physical medicine. In an effort to meet this need, the Office is supporting the training of more than 180 resident physicians in physical medicine and rehabilitation, which is an increase of some 40 percent over those in such training in 1960. Another effort in this direction was to stimulate interest in residency training among those undergraduates in medical schools who attend summer sessions.

Added recognition was given during the year to the specialty of rehabilitation nursing. A consultant in rehabilitation nursing was added to the central Office staff during the year and emphasis was given to the establishment of additional training facilities for nurses, resulting in an increase in applications for training grants in this field for the coming year.

Expenditures for the Support Program

Grants to States and Territories for services for basic support of vocational rehabilitation services were \$54,302,013 in 1961. This is an increase of about 11 percent over 1960 and more than 136 percent over the \$23 million which States received in 1954. Eleven States, the District of Columbia, and Guam acquired all of the Federal allotments available to them by making available sufficient matching amounts. Six States acquired more than 95 percent but less than 100 percent, 2 States 90-95 percent, 10 States and Puerto Rico 70-80 percent; 6 States and the Virgin Islands 60-70 percent, 5 States 50-60 percent, 3 States 40-50 percent, and 1 State less than 40 percent.

The average per-capita expenditures for vocational rehabilitation services in all States and Territories rose from 22 cents in 1954 to 49 cents in 1961, an increase of 123 percent.

EXTENSION AND IMPROVEMENT PROGRAM

Federal grants totaling \$1,019,483 were made in 1961 to provide additional financial assistance to State agencies for projects which would extend and improve their existing vocational rehabilitation programs. During 1961, grants were made for a total of 92 projects in 41 States. They were made for these purposes: establishment of workshops and rehabilitation facilities, including optical aids centers; improvement of specialized services to disability groups such as mentally ill, mentally retarded, homebound, epileptics, cardiac and other disability groups; and improvement of program administration.

Among the disability groups served by the extension of program activity in 1961 were the mentally ill, mentally retarded, blind, aged, cerebral palsied, deaf, those with speech and hearing disabilities, and alcoholics. Twenty-six of the projects were for the establishment of either rehabilitation facilities or workshops and 32 were for the employment of specialized counselors or other professional staff.

STATE PLANS

Six State agencies amended their plans for vocational rehabilitation services to include provisions for the establishment of workshops, bringing the total number of State agencies with such plan provisions to 57. The number of State agencies with plan provisions for the establishment of rehabilitation facilities remained unchanged at 58.

State vocational rehabilitation legislation included, in 1961, an enactment of comprehensive basic legislation, by Kansas, embracing

authority for rehabilitation services to help disabled people achieve self-care rather than employment; and brings the States and Territories with such authority to one-third of the total number.

Small Business

State rehabilitation agencies are authorized by legislation to use funds to encourage and establish disabled persons in small business enterprises when, in an agency's discretion, it will be the most suitable and effective means of an individual's rehabilitation.

In such cases, vocational training is directed toward operation of a specific business, after which necessary tools, licenses and an initial stock of goods are provided, and the operation given nominal supervision by the State agency.

The small business enterprises which were established for disabled persons and supervised by State rehabilitation agencies in 1961 involved about one percent of the 92,500 rehabilitations during the year.

A 3-year study of the causes of success or failure of small businesses operated by handicapped persons has revealed that, as a general rule, maturity, rather than age, was a factor for success; that formal education was an insignificant factor, compared to good personality traits; that the severity of disability does not seem to affect customer relationships; and that disabled operators who have a stake of their own in the business are more likely to succeed.

The study was made possible through a research and demonstration grant from the Office, and the complete results will be available to all State rehabilitation agencies as a standard guide.

International Research

Rehabilitation research received added impetus during the year with institution of a cooperative program among the United States and nine foreign countries.

Under provisions of Public Law 480—the Agricultural Trade Development and Assistance Act—the Congress allotted \$930,000 in counterpart funds to the Office, to support cooperative research in India, Pakistan, Brazil, Yugoslavia, UAR-Egypt, Burma, Indonesia, Israel, and Poland. The funds have accumulated to the credit of the United States from the sale of surplus commodities to those countries, and may be spent only for beneficial purposes within their borders.

At the close of the year, 13 projects in three of the countries had been approved for activation—6 in Israel, 4 in India, and 3 in Brazil. Projects in the six other countries were in various stages of development, and India and Israel were preparing additional projects.

India has a great need for more research into vocational rehabilitation of lepers and is directing some of its research plans in this direction, as well as into planning for vocational training of disabled persons according to prevailing industrial and agricultural patterns. Israel, among other projects, is experimenting with methods of training blind persons for work in the textile industry, and methods of preparing cerebral palsied persons for employment.

Plans were under way during the year to send 12 United States surgeons of outstanding reputation to India to do research work with Dr. Paul Brand at the Christian Medical College, in Vellore, and to help build a broad program for the rehabilitation of lepers. The surgeons will go in rotation and each will work in India for a period of approximately 2 months.

A request has gone out to the Indian Ministry of Health to nominate Indian surgeons on an exchange basis.

The Office of Vocational Rehabilitation, during the fiscal year 1961 planned programs for 18 long-term rehabilitation trainees from 13 foreign countries—Brazil, Chile, Uruguay, Costa Rica, Viet Nam, India, the Philippines, Israel, Sweden, Denmark, Finland, Guatemala, and Yugoslavia. The areas of study included rehabilitation philosophy and methods, physical therapy, prosthetics, occupational therapy, orthopedic surgery, and physical medicine and rehabilitation. Trainees were interested in both the physically and mentally handicapped.

The Office also planned short-term visits for some 140 persons of professional and technical backgrounds related to rehabilitation who were interested in becoming better acquainted with the U.S. program.

Table 1.—Number of referrals and cases, by agency, fiscal year 1961

Agency ¹	Referrals				Cases				
	During fiscal year			Re-main-ing at end of year ²	During fiscal year				Re-main-ing at end of year ³
	Total	Accepted for serv-ices	Not accepted for serv-ices ⁴		Total active load (receiv-ing serv-ices)	Closed from active load			
						Reha-bili-tated	After reha-bilita-tion plan initi-ated ⁵	Be-for reha-bilita-tion plan initi-ated ⁶	
United States, total.....	409,295	140,476	135,490	133,329	320,963	92,501	11,980	19,460	197,022
Alabama.....	7,660	3,721	1,480	2,459	9,663	2,787	409	588	5,879
Alaska.....	334	88	72	174	286	43	14	26	203
Arizona:									
General.....	1,756	642	597	517	1,345	440	71	72	762
Blind.....	125	53	40	32	176	38	8	6	126
Arkansas.....	7,543	2,855	2,523	2,165	5,598	2,459	183	129	2,827
California.....	27,646	6,900	16,054	4,692	16,115	2,487	1,052	2,839	9,737
Colorado.....	4,712	2,004	1,126	1,582	3,992	1,152	280	145	2,415
Connecticut:									
General.....	3,273	1,435	1,056	782	3,904	874	173	207	2,650
Blind.....	211	82	75	54	212	62	24	0	126
Delaware:									
General.....	1,216	581	476	159	1,300	520	16	76	688
Blind.....	64	37	23	4	55	17	12	2	24
District of Columbia.....	4,903	1,460	2,792	651	2,727	713	165	222	1,627
Florida:									
General.....	15,153	4,661	6,277	4,215	9,864	3,404	539	627	5,294
Blind.....	4,054	425	2,343	1,286	1,095	300	59	44	692
Georgia.....	21,685	6,867	6,428	8,390	12,816	6,014	325	366	6,111
Guam.....	171	22	114	35	97	20	6	27	44
Hawaii:									
General.....	1,953	626	491	836	1,037	210	97	124	606
Blind.....	27	13	6	8	54	9	5	2	38
Idaho:									
General.....	2,045	408	936	703	950	330	39	22	559
Blind.....	44	25	15	4	56	12	4	3	37
Illinois.....	12,519	6,702	3,436	2,381	15,404	3,879	871	1,537	9,117
Indiana:									
General.....	3,088	1,709	677	702	4,217	1,162	61	130	2,864
Blind.....	163	84	42	37	236	42	18	30	146
Iowa:									
General.....	5,914	1,883	1,663	2,368	4,066	1,234	168	168	2,496
Blind.....	178	71	37	70	205	44	5	5	151
Kansas:									
General.....	3,567	1,280	927	1,360	3,205	961	117	235	1,892
Blind.....	395	107	136	152	284	76	9	17	182
Kentucky.....	7,294	1,884	3,120	2,290	4,072	1,475	82	248	2,267
Louisiana:									
General.....	5,298	3,288	1,062	948	8,390	1,996	239	529	5,626
Blind.....	747	186	104	457	694	120	24	24	526
Maine:									
General.....	2,106	492	702	912	1,264	376	66	87	735
Blind.....	284	202	61	21	293	65	14	42	172
Maryland.....	5,652	2,304	1,407	1,941	5,925	1,491	187	524	3,723
Massachusetts:									
General.....	8,974	2,448	2,740	3,786	5,497	1,687	163	334	3,313
Blind.....	303	134	32	137	407	85	15	20	287
Michigan:									
General.....	9,649	3,687	1,943	4,019	9,777	3,000	435	158	6,184
Blind.....	360	183	87	90	471	87	46	49	289
Minnesota:									
General.....	6,976	2,169	2,223	2,584	5,644	1,311	280	137	3,916
Blind.....	1,025	130	327	568	448	99	10	24	315
Mississippi:									
General.....	3,622	1,793	594	1,235	3,721	1,360	81	203	2,077
Blind.....	1,168	454	485	229	1,044	343	56	39	606
Missouri:									
General.....	7,721	2,352	3,013	2,356	5,149	1,625	248	204	3,072
Blind.....	720	193	242	285	516	142	24	11	339
Montana:									
General.....	2,188	647	759	782	1,570	425	16	38	1,091
Blind.....	367	47	281	39	78	22	2	3	51
Nebraska:									
General.....	1,703	889	220	594	2,433	570	40	64	1,759
Blind.....	279	82	125	72	161	65	4	3	89

See footnotes at end of table.

Table 1.—Number of referrals and cases, by agency, fiscal year 1961—Con.

Agency ¹	Referrals				Cases				
	During fiscal year			Re-main-ing at end of year ²	During fiscal year				Re-main-ing at end of year ³
	Total	Accept-ed for serv-ices	Not accept-ed for serv-ices ²		Total active load (receiv-ing serv-ices)	Closed from active load			
						Reha-bilitat-ed	After reha-bilita-tion plan initi-ated ⁴	Before reha-bilita-tion plan initi-ated ⁵	
Nevada:									
General.....	796	205	518	73	389	116	55	60	158
Blind.....	53	22	12	19	54	14	2	2	36
New Hampshire:									
General.....	495	290	94	111	771	194	132	9	436
Blind.....	45	20	10	15	69	15	4	3	47
New Jersey:									
General.....	6,520	2,440	1,934	2,146	4,901	1,521	210	261	2,909
Blind.....	827	216	206	405	531	161	16	16	338
New Mexico:									
General.....	1,355	353	648	354	684	284	51	9	340
Blind.....	233	55	48	130	117	34	0	1	82
New York:									
General.....	28,928	10,003	9,113	9,812	21,221	6,447	765	1,225	12,784
Blind.....	1,214	433	285	496	1,044	286	36	93	629
North Carolina:									
General.....	12,022	7,775	3,055	1,192	15,532	5,328	464	608	9,132
Blind.....	1,317	483	570	264	1,457	432	25	91	909
North Dakota.....	1,818	505	538	775	1,296	355	43	57	841
Ohio:									
General.....	9,470	3,343	2,996	3,131	7,062	1,875	212	439	4,536
Blind.....	864	433	156	275	1,007	203	30	46	728
Oklahoma.....	6,292	2,874	1,403	2,015	8,288	1,750	187	556	5,795
Oregon:									
General.....	5,640	984	2,693	1,963	2,650	745	165	242	1,498
Blind.....	244	41	121	82	151	38	8	7	98
Pennsylvania:									
General.....	30,332	10,692	7,778	11,862	22,791	6,235	902	836	14,818
Blind.....	1,753	362	547	844	996	221	40	46	689
Puerto Rico.....	9,400	2,145	2,081	5,174	5,751	1,193	105	404	4,049
Rhode Island:									
General.....	2,740	1,134	485	1,121	2,547	803	158	24	1,562
Blind.....	115	90	7	18	271	58	16	8	189
South Carolina:									
General.....	10,988	3,172	4,712	3,104	6,461	2,008	174	227	4,052
Blind.....	358	161	139	58	350	109	8	20	213
South Dakota:									
General.....	1,084	295	255	534	1,018	250	72	20	676
Blind.....	427	31	211	185	103	27	3	1	72
Tennessee:									
General.....	10,067	3,329	3,139	3,599	7,293	2,469	258	279	4,287
Blind.....	1,197	309	299	589	860	258	19	49	534
Texas:									
General.....	13,764	3,863	4,514	5,387	11,513	2,720	300	1,196	7,297
Blind.....	1,267	443	465	359	861	376	9	17	459
Utah.....	1,910	817	515	578	2,114	547	72	28	1,467
Vermont:									
General.....	1,240	363	241	636	839	183	70	41	545
Blind.....	50	19	23	8	53	10	11	3	29
Virginia:									
General.....	14,877	4,428	6,449	4,090	9,091	3,239	213	587	5,052
Blind.....	660	138	208	314	292	113	13	5	161
Virgin Islands.....	91	27	0	64	81	21	1	0	59
Washington:									
General.....	5,821	1,720	2,224	1,877	4,233	984	190	394	2,665
Blind.....	336	122	121	93	259	71	12	10	166
West Virginia.....	16,906	5,578	4,301	7,027	12,690	3,490	70	1,104	8,026
Wisconsin:									
General.....	8,172	2,201	2,748	3,223	6,149	1,521	75	32	4,521
Blind.....	161	88	40	33	217	56	7	4	150
Wyoming.....	611	171	219	221	393	110	15	10	258

¹ In States with 2 agencies, the State division of vocational rehabilitation is designated as "general," and the agency under the State commission or other agency for the blind is designated as "blind."

² Services declined, services not needed, individual not eligible, individual needing services other than vocational rehabilitation, referred to other agencies, migratory shifting of the individual, etc.

³ Eligibility for rehabilitation not yet determined.

⁴ Closed after rehabilitation plan was initiated; received rehabilitation service but never reached the point of employment because of personal factors, illness, aggravated disability, etc.

⁵ Closed prior to initiation of rehabilitation plan because of indifference of individual, increase in degree of disability, loss of contact, etc.

⁶ In process of rehabilitation on June 30, 1961.

Table 2.—Vocational rehabilitation grants, 1961, State divisions of vocational rehabilitation

State or territory	Support grants	Extension and improvement grants	Total
Total	\$48,498,563	\$925,351	\$49,423,914
Alabama	2,251,500	-----	2,251,500
Alaska	118,966	-----	118,966
Arizona	422,178	8,414	430,592
Arkansas	1,468,318	14,554	1,482,872
California	2,904,802	121,984	3,026,786
Colorado	695,958	14,253	710,211
Connecticut	343,416	16,521	359,937
Delaware	136,625	5,000	141,625
District of Columbia	227,958	3,750	231,708
Florida	1,355,417	-----	1,355,417
Georgia	2,634,810	32,025	2,666,835
Guam	60,969	5,000	65,969
Hawaii	181,402	5,094	186,496
Idaho	172,504	-----	172,504
Illinois	2,080,765	78,418	2,159,183
Indiana	473,852	20,312	494,164
Iowa	807,857	17,869	825,726
Kansas	604,803	13,580	618,383
Kentucky	590,332	24,733	615,065
Louisiana	1,082,578	-----	1,082,578
Maine	272,174	-----	272,174
Maryland	632,250	-----	632,250
Massachusetts	865,966	32,178	898,144
Michigan	1,343,251	63,841	1,407,092
Minnesota	963,953	27,155	991,108
Mississippi	836,025	-----	836,025
Missouri	642,844	28,693	671,537
Montana	184,058	5,486	189,544
Nebraska	308,849	7,658	316,507
Nevada	54,293	-----	54,293
New Hampshire	79,339	-----	79,339
New Jersey	961,625	39,858	1,001,483
New Mexico	199,093	7,245	206,338
New York	3,348,146	47,688	3,395,834
North Carolina	1,922,192	37,145	1,959,337
North Dakota	368,158	5,148	373,306
Ohio	1,034,413	49,929	1,084,342
Oklahoma	1,338,755	18,898	1,357,653
Oregon	491,082	12,551	503,633
Pennsylvania	3,877,028	65,075	3,942,103
Puerto Rico	852,431	-----	852,431
Rhode Island	269,241	5,738	274,979
South Carolina	1,114,295	-----	1,114,295
South Dakota	243,100	4,451	247,551
Tennessee	1,847,754	-----	1,847,754
Texas	1,462,031	12,000	1,474,031
Utah	304,680	7,230	311,960
Vermont	166,182	-----	166,182
Virginia	1,276,278	-----	1,276,278
Virgin Islands	20,037	-----	20,037
Washington	879,447	23,160	902,607
West Virginia	1,197,729	15,167	1,212,896
Wisconsin	930,843	22,500	953,343
Wyoming	96,011	5,000	101,011

Table 3.—*Vocational rehabilitation grants, 1961, State commissions or agencies for the blind*

State or Territory	Support grants	Extension and improvement grants	Total
Total.....	\$5,803,450	\$94,132	\$5,897,582
Arizona.....	84,781	2,107	86,888
Connecticut.....	59,075	4,130	63,205
Delaware.....	35,519	.....	35,519
Florida.....	450,000	.....	450,000
Hawaii.....	38,772	.....	38,772
Idaho.....	16,584	.....	16,584
Indiana.....	58,345	.....	58,345
Iowa.....	156,806	4,601	161,407
Kansas.....	134,000	3,855	137,855
Louisiana.....	150,000	.....	150,000
Maine.....	79,478	.....	79,478
Massachusetts.....	172,250	9,820	182,070
Michigan.....	116,813	.....	116,813
Minnesota.....	182,073	.....	182,073
Mississippi.....	398,711	.....	398,711
Missouri.....	240,545	.....	240,545
Montana.....	38,655	.....	38,655
Nebraska.....	73,893	3,829	77,722
Nevada.....	15,120	5,000	20,120
New Hampshire.....	26,715	1,250	27,965
New Jersey.....	203,365	3,693	207,058
New Mexico.....	50,367	.....	50,367
New York.....	421,498	29,653	451,151
North Carolina.....	554,274	.....	554,274
Ohio.....	346,199	9,250	355,449
Oregon.....	89,548	.....	89,548
Pennsylvania.....	410,301	14,439	424,740
Rhode Island.....	63,897	1,200	65,097
South Carolina.....	74,729	.....	74,729
South Dakota.....	60,767	1,112	61,879
Tennessee.....	338,183	.....	338,183
Texas.....	293,212	.....	293,212
Vermont.....	43,703	193	43,896
Virginia.....	107,502	.....	107,502
Washington.....	123,472	.....	123,472
Wisconsin.....	94,298	.....	94,298

Saint Elizabeths Hospital

THE PAST YEAR has been one of activity; a number of changes have been made in the care of the patients and in the administration of the Hospital. Probably in no field of medicine is change so striking as in that of psychiatry. New concepts of patient care are emerging, a greater stress is being laid on the social rehabilitation of patients, and on the introduction of social concepts into the operation of the Hospital itself. Some of these changes in concept are illustrated by the report of the Joint Commission on Mental Illness and Health which appeared during the year. In general, it may be said that this volume points up first of all the drastic shortages which exist throughout the country in the professional and subprofessional fields relating to hospital treatment of the mentally ill. Space does not permit a full discussion of the various recommendations of the Commission, but the comment may be made that in spite of the recommendations it seems likely that for many years to come the large mental hospital will be needed. There seems no practical way of eliminating some of the large hospitals, among which Saint Elizabeths is to be counted. The best that can be done in the foreseeable future is to decentralize to some extent; this is being done in Saint Elizabeths Hospital as elsewhere.

The two major problems which confront the Hospital are those of understaffing and overcrowding. Some progress has been made in remedying the latter situation. A vigorous attempt has been made to send to nonmental institutions patients who could properly be cared for outside the Hospital. A considerable number, for instance, have been sent through the years to the District of Columbia Village, and more recently, foster homes are being found. The Glenn Dale Hospital, formerly used entirely for tuberculosis patients, is being converted by the District into a chronic-disease hospital, and several patients have been sent there. A considerable number, too, are being referred to the Adult Mental Health Clinic of the District for out-patient treatment. Every attempt is thus being made to return patients to the community or to provide care in other types of institutions for patients who do not need the intensive care which can be given in a hospital like Saint Elizabeths.

During the year, the admissions reached their highest point since 1945, namely 1,981. Discharges have risen at a somewhat more rapid rate, reaching the sum of 1,395 during the year, the live discharges equaling 77 percent of the total admissions. The number of patients on the rolls increased by almost 300, but this includes a large number who are on temporary or convalescent leave in the community, but not finally discharged. There has been a slight decrease in the average number of patients in the hospital, a situation quite different from that of two decades ago when an increment of 100 a year was to be expected.

In the field of staffing, an active recruiting campaign has been carried on especially as to physicians and nurses. Thanks to the generosity of the Congress, a personnel increase of 323 took place during the year. There are still vacancies for physicians; once again attention is invited to the fact that Federal salaries for trained physicians in the field of psychiatry particularly are not keeping pace with those offered by the several States. It is indeed an open question whether the salaries authorized under the Classification Act are adequate or can be made adequate to meet the increased competition from other sources. At least one other Government agency, the Veterans Administration, is able to pay substantially higher salaries. During the year, the nursing assistants were reclassified upward, and it is the hope that this may result in increasing the quality of the personnel on the wards and in holding them once they are recruited and trained.

The general health of the patient population has been good, thanks to the untiring efforts of the entire staff. Even though the physicians and nurses are working under pressure, they have shown a high degree of dedication to duty, and it is a pleasure to pay tribute to them. Various programs of patient care have been prosecuted and developed; the use of open wards; the setting up of remotivation programs; the use of patients' self-government, for example. The so-called "tranquilizers" are proving their value, although at times the cost appears almost staggering. The question may be raised whether, occasionally at least, the use of the tranquilizers does not do more to allay the anxieties of the physician than it does those of the patient!

The aged continue to be a problem, and this is not peculiar to Saint Elizabeths. The proper care of the aged person who is showing mild mental symptoms is a problem which has not yet been satisfactorily solved. As a result, the mental hospital seems to be the only way out for the families who are troubled by the vagaries of the patients.

During the year, the Biometrics Branch has been reactivated. The statistical knowledge of mental hospital patients is extraordinarily deficient, and it is the hope of the Hospital that this Branch may cast

much light upon the details of the incidence and duration of mental disorders among those hospitalized.

Mention has been made earlier of the apparent abuse of the writ of habeas corpus by the patients. It is realized that this writ is a constitutionally guaranteed remedy, but the fact remains that an inordinate amount of time of the physicians, ward and clinical personnel, is taken up in answering in writing and by live testimony in court, the petitions filed by the patients. During the year, 212 orders to show cause were served on the Hospital and 177 writs of habeas corpus were issued. Each of the latter means that the physicians must go to court with the patient and testify as to why he is being held. It is of some interest that only three of these petitions were granted and one continued. This in itself indicates the frivolousness of many of the petitions. The Hospital has formally requested the District Court to arrange to have hearings on these writs held at the Hospital rather than in court. So far, this request has been denied, but it is still our hope that the saving of the time of the judges as well as of the Hospital staff may prevail and that this arrangement can be put into effect.

As a part of its program of public education, the Hospital conducted a very successful Mental Health Week, as a part of which a Mental Health Institute was held. At this Institute, several prominent speakers appeared, including the Secretary of Health, Education, and Welfare, the Honorable Abraham Ribicoff. Something over 5,000 persons visited the Hospital during the "Open House Day."

As usual, many visitors from foreign countries have come to the Hospital. This year especially, as a result of a tour of the International Hospital Federation, and the meeting of the World Congress of Psychiatry, no less than 37 countries were represented among the visitors. It is always gratifying to know that Saint Elizabeths excites so much interest among the professional people of other countries, and such visits are most stimulating to the Staff.

The various agencies of Government have been most cooperative and helpful; notably, the Veterans Administration, the Department of Justice, and the Health Department, Public Welfare Department, and Rehabilitation Office of the District of Columbia.

The interest of various individuals and organizations in the community continues unabated, and indeed is growing. No less than 767 volunteers have during the year given 24,000 hours of uncompensated service. This has meant much to the patients, and indirectly has been of service in promoting understanding on the part of the public. Unfortunately, it is impossible to enumerate the various organizations, but the thanks of the Hospital are none the less most sincere. For

the coming summer, a plan for the use of high school students as volunteers is being worked out. This promises to be very successful as the means of bringing to young people a true concept of what mental illness is like and how those afflicted may be helped.

The Hospital is well aware of its primary obligation; namely, to give the best possible treatment to the patients. It has, however, other obligations, notably in the field of training of personnel and research into the causes and prevention and treatment of mental disorder. As for training, the George Washington University and Howard University Medical Schools have utilized the facilities of the Hospital for the training of their medical students. The Hospital, likewise, is the only public mental institution in the country which is approved for rotating internship. It is approved, likewise, for a 3-year residency in psychiatry, and for residencies in surgery and in radiology. During the year, it has been approved for a 2-year residency in anatomical pathology. The Hospital is fully accredited by the Joint Commission on the Accreditation of Hospitals. During the year, plans for a third-year of Chaplaincy residency have been developed. There are also internships, residencies, and planned field-work in dentistry, psychology, social work, occupational therapy, and clinical pastoral work. Instruction in nursing is carried on on both the undergraduate and graduate levels, the former by affiliation with various hospital training schools. A closed circuit television has been a substantial addition to the training program. Forty percent of the cost of training is now borne directly by the Federal Government, the balance, that portion representing service to patients, being included in the per diem charged to the District of Columbia for its patients.

The other and third obligation of the Hospital is in the field of research. This has been very substantially expanded and this year for the first time a separate budget for research was included in the appropriations for the Hospital, the cost of this item being charged entirely to the Federal Government and not allocated in part to the District Government. The research activities of the Hospital have been thoroughly integrated with those of the Clinical Neuropharmacology Research Center operated by the National Institute of Mental Health in conjunction with the Hospital. No less than 23 clinical projects are under way in addition to a substantial amount of basic science studies. Several grants have already been made to the Hospital by the National Institute of Mental Health under legislation recently enacted.

Division of Clinical Services

CLINICAL BRANCHES

At present, the general care and treatment of the patients is carried on by four clinical branches, three of which are subdivided into services. In addition, a Medical and Surgical Branch is charged with the acute medical and surgical treatment of all patients and emergency attention to employees. There are three admission services. Civilian patients under 64 years of age are admitted directly to the Dix Pavilion, those over 64 being admitted directly to the Geriatric Building. Sex psychopaths and male prisoners, under charges or sentence, or found not guilty by reason of insanity, are admitted directly to the John Howard Pavilion. It is planned to make the William A. White Service also an admitting service. As previously noted, there is a steady increase in the number of elderly and infirm patients, and there seems to be no reason to expect this to diminish unless other suitable facilities of a nonpsychiatric nature can be found or established in the community. The West Side Service, temporarily abolished when the transfer of patients was made from the old Howard Hall to the new John Howard Pavilion, has now been re-established. The number of voluntary admissions has increased slightly, being 226 during the year. This provision of law should be used more than it is, particularly since the present commitment laws of the District of Columbia are among the most cumbersome and traumatic to the patient of any in the United States. It may be hoped that some time in the future the commitment laws of the District may be revised to become at least as humane as those of most of the other States.

All of the accepted treatments are being used; group and individual psychotherapy, psychodrama, occasional electro-convulsive therapy, medications, milieu therapy, and remotivation programs. Two of the latter have been started during the year, one on the Detached Service and one on the West Lodge Service, which are showing excellent results. In these particular projects, the use of volunteers has been invaluable.

MEDICAL AND SURGICAL BRANCH

A very considerable expansion of activity and of staff has taken place in this Branch and much more may be expected within the next year or two. A study is now under way by a group of hospital consultants as to the needs in building, organization, and personnel. The present Medical and Surgical Building is over 30 years old, and serious attention should be given to the possibility of its replacement. Pharmacy activities have been increased and now all of the wards

are receiving their drugs directly from the Pharmacy. The Branch has cared for over 2,000 inpatients and 50,000 outpatients during the year, the average stay in the Medical and Surgical Building being 29 days. The Dental Section enumerated over 11,000 visits. The work of the Branch continues to be unusually varied and of high efficiency.

NURSING BRANCH

This Branch, in spite of its shortages, notably in the graduate nurse field, has rendered excellent service in the care of patients. An active program of in-service training for all types of ward personnel is carried on, and 12 schools of nursing and the Navy Hospital Corps send affiliates for instruction in the care of the mentally ill. Training on a post-graduate level is provided for graduate students from Catholic University and from Columbia Union College. In this Branch, as in other parts of the Hospital, the employee development program has been utilized, employees being sent for longer or shorter periods of time to take courses of instruction which will make them more useful in their Hospital service.

PSYCHOTHERAPY BRANCH

This Branch embraces individual and group psychotherapy, psychodrama, dance and art therapy. The Director of this Branch is also the coordinator of professional training. The various types of professional training continue to expand and it is expected very shortly that a new type of internship, namely, that of psychodrama intern, will be established.

PSYCHOLOGY BRANCH

Four research projects were completed during the year, one of them being a thesis for the degree of Doctor of Philosophy. Four are now under way. One hundred and seventy-five hours of teaching were carried out by the members of the Branch, and very nearly 5,000 tests were given. In addition, a certain amount of individual and group psychotherapy is carried on by the Branch.

RECREATIONAL THERAPY BRANCH

The personnel of this Branch has been expanded and the program accordingly. Many parties and entertainments, both on the wards and in the Red Cross Building and in Hitchcock Hall, have been conducted. The Bolling Air Force Base has been most generous in permitting the patients to use the swimming pool. It is hoped that eventually the Hospital may have a pool of its own, as this form of

exercise and recreation means much to the patient. Community participation in the whole program has been most remarkable.

OCCUPATIONAL THERAPY BRANCH

In this Branch too, the personnel and program have been substantially expanded and must be expanded still further. Eight student interns have each received three months of affiliation in psychiatry as related to occupational therapy.

VOLUNTEER SERVICES BRANCH

As it has been mentioned above, the work of the volunteers is a particularly valuable feature of the Hospital, both from the point of view of the patient and the point of view of public understanding. During the year, 767 volunteers participated, giving 24,000 hours of entirely uncompensated work. The activities of this Branch continue to expand as public interest and understanding grow.

SOCIAL SERVICE BRANCH

This Branch, likewise, has shown a very substantial expansion in personnel and in activity, and works closely with the rehabilitation counselors provided by the District of Columbia Division of Rehabilitation. During the year, members of the Branch conducted interviews with patients and others totalling nearly 24,000. Three hundred and seventy-one transfers, foster home placements, or referrals to other agencies were arranged, an increase over the preceding year of 254. The value of the return of this number of patients to the community can hardly be overestimated. There is need for further foster homes and nursing homes and adequate financing by the District of Columbia for them. If they were available, more patients still could be returned to the community. In addition to the work of the Social Service Branch, a special public health nursing project has been carried on at the Hospital under a grant to the Health Department of the District of Columbia.

CHAPLAIN SERVICE BRANCH

The Chaplain Service Branch, under Jewish, Protestant, and Roman Catholic chaplains, carries out religious ministry to the patients, both in chapel services and on the wards. New patients are visited, and such other patients as request the services of the chaplains of their faith. Training is carried on both for Protestant and Roman Catholic clergy and for theological students. The community clergy as well have been most helpful in participating in special services. The Director of Protestant Chaplain Services served during the year

as the Chairman of the Mental Health Week Committee. The recent finishing off of the rest of the Chapel Undercroft has greatly improved the office facilities of the Branch.

MEDICAL RECORDS BRANCH

The value of readily accessible adequate records is important to any well regulated hospital. During the year, in addition to the continuation of the open-shelf filing, which has worked out very well, preparations have been made for some microfilming, and for the elimination of some old duplicate records. The inauguration of the addressograph system has reduced the likelihood of errors in filing. The Branch has taken on the responsibility for the preparation of medical abstracts.

LABORATORY BRANCH

The demands on this Branch continue to grow, but they are being well met. An isotope unit is now complete and much new equipment has been obtained. The use of automation has been developed substantially. If it were not for this, it is unlikely that the total of 204,000 tests could very well have been carried out. During the year, the Laboratory Branch was approved for a 2-year residency training in anatomical pathology. Considerable research is under way. During the year, 193 autopsies or 45.4 percent were performed.

LIBRARY SERVICES

The Medical Library provides library service to the medical staff, both by making accessible volumes in the Hospital library and the several branches such as those in the Nursing Branch, Laboratory, and Medical and Surgical Branch and obtaining others through inter-library loans. There were 1,120 accessions during the year, bringing the total of accessioned volumes to 22,000, plus a large number of reprints and other miscellaneous papers. Two hundred and eighty-six periodicals are subscribed to. It is expected that within the next few months, work will begin on the additions to the Administration Building, which among other things, will provide a very considerable additional space for the Medical Library. The space is greatly needed and the addition will be most welcome. The Patients' Circulating Library carried on a very active program with the aid of 12 volunteers. There are now 68,000 volumes in the library, with a gain during the current year of 3,950. Books are provided to the various wards, and a large number of additional programs are carried on, such as bookbinding, language lessons, typewriting and stenographic lessons, and book reviews.

BEHAVIORAL SCIENCES BRANCH

This Branch, set up during the current year, is operated in close coordination with the National Institute of Mental Health joint project previously mentioned. Eleven papers were published by members of the Branch during the year. This is the first year in which a separate appropriation has been made by the Congress for research at Saint Elizabeths Hospital.

SANITARY ENGINEERING BRANCH

This Branch carries out a number of important activities—insect and rodent control, inspection of food handling and service, among others.

Division of Administration

Unfortunately, space does not permit an enumeration of the various activities of the branches and sections in this division. They are varied and include such matters as financial, personnel, construction, engineering, grounds, purchasing and warehousing, laundry, dietary, budget, and maintenance. All of these sections have been extremely active during the year and highly efficient. Much is involved in the day-to-day maintenance of the physical plant of an institution of this size. In addition, various improvements have been carried out and some reconstruction. Work has been started on the Continued Treatment Building No. 9, and it is expected that within a few months construction will begin on the addition to the Administration Building. Planning is now under way for the Rehabilitation Building for which preliminary appropriations have already been made.

The employee development program should be mentioned as one which has contributed considerably to the efficiency of the employees. It has been actively utilized under the general supervision of the Personnel Branch.

Needs of the Hospital

In general, these may be summed up in the three words—personnel, buildings, and equipment. Although expansion of the capacity of the Hospital is probably not needed, many older buildings should be replaced in line with modern ideas. A salary scale competitive with those of the States and of other agencies of the Federal Government is urgently needed, especially for trained psychiatrists. Saint Elizabeths Hospital is a National institution, and should be a model for the States. This principle has already been recognized in part by the

Congress, and the support of the Secretary of Health, Education, and Welfare in the national goals of the Hospital is deeply appreciated. Over 100 years ago, the Superintendent of Saint Elizabeths Hospital wrote, "A government establishment situated at the capital of the republic is in every respect a representative institution." Those words are equally true today. Saint Elizabeths has always aimed, and will continue to aim, at the goal expressed in the organic act, "the most humane care and enlightened curative treatment" of the mentally ill.

Table 1.—Movement of patient population, fiscal year 1961

	Total	Male			Female		
		White	Colored	Total	White	Colored	Total
Total number under care and treatment, fiscal year 1961.....	9,827	2,688	2,299	4,987	2,730	2,110	4,840
Remaining on rolls, June 30, 1960.....	7,846	2,134	1,760	3,894	2,234	1,718	3,952
Admitted during fiscal year 1961.....	1,981	554	539	1,093	496	392	888
Total discharged and deceased.....	1,835	520	421	941	555	339	894
Discharged.....	1,395	397	334	731	401	263	664
Conditions on discharge:							
Recovered.....	56	20	20	40	9	7	16
Social recovery.....	490	84	73	157	167	156	323
Improved.....	593	175	148	323	186	84	270
Unimproved.....	196	100	42	142	38	16	54
Worse.....	0	0	0	0	0	0	0
No mental disorder.....	67	17	49	66	1	0	1
Unknown.....	3	1	2	3	0	0	0
Deceased.....	440	123	87	210	154	76	230
Remaining on rolls, June 30, 1961.....	7,992	2,168	1,878	4,046	2,175	1,771	3,946
Corrections, change in sex and color.....	0	+1	-1	0	0	0	0
Adjusted on rolls, June 30, 1961.....	7,992	2,169	1,877	4,046	2,175	1,771	3,946
Absent on visit and elopement.....	1,128	168	260	428	299	401	700
Patients in hospital, June 30, 1961.....	6,864	2,001	1,617	3,618	1,876	1,370	3,246

Table 2.—Consolidated statement of movement of patients, by classification, fiscal year 1961

	Reimbursable patients										Nonreimbursable patients																		
	Total	Subtotal	Bureau of Indian Affairs	D.C. residents	D.C. voluntary	U.S. Soldiers' Home	Veterans' Administration	Other	Subtotal	Army	Bureau of Employees Compensation	Immigration and Naturalization Service	Bureau of National Homes	Canadian Insane	Canal Zone	Coast Guard	D.C. nonresidents	Federal reservations	Foreign Service	Interned aliens	Marine Corps	Navy	D.C. prisoners (sexual psychopaths)	D.C. prisoners	Military prisoners	U.S. prisoners	Public Health Service	Virgin Islands	
On rolls, June 30, 1960.....	7,846	6,220	58	5,494	228	48	386	6	1,626	197	2	2	2	53	16	15	275	38	8	4	17	69	63	594	23	81	38	129	
Admitted to June 30, 1961.....	1,981	1,481	0	1,214	226	19	12	10	500	0	0	0	0	0	0	0	1	66	11	0	0	0	0	7	377	0	20	0	18
Separated, fiscal year 1961.....	1,835	1,214	13	947	157	16	72	9	621	6	1	0	0	2	0	1	259	62	9	0	3	2	5	230	1	21	10	9	
Deaths.....	440	365	1	365	13	5	18	0	38	5	0	0	0	1	0	1	17	3	2	0	2	1	0	2	1	0	0	3	
Discharges.....	1,395	812	12	582	144	11	54	9	583	1	1	0	0	1	0	0	242	59	7	0	1	1	65	228	0	21	10	6	
On rolls, June 30, 1961.....	7,992	6,487	45	5,761	297	51	326	7	1,505	191	2	2	2	51	16	14	17	42	10	4	14	67	65	741	22	80	28	138	
Changes in category.....	0	-222		-297	-5		+80		+222		+1						+296	-5					-1	-19	-50				
Adjusted on rolls, June 30, 1961.....	7,992	6,265	45	5,464	292	51	406	7	1,727	191	2	2	2	51	16	14	313	37	10	4	14	67	64	722	22	30	28	138	
On visits and eloquent, June 30, 1961.....	1,128	947		726	140	11	64	6	181								72	18	4			1	24	58			4		
In hospital, June 30, 1961.....	6,864	5,318	45	4,738	152	40	342	1	1,546	191	2	2	2	51	16	14	241	19	6	4	14	66	40	664	22	30	28	134	
Total treated, fiscal year 1961.....	9,827	7,701	58	6,708	454	67	398	16	2,126	197	2	2	2	53	16	15	276	-104	19	4	17	69	70	971	23	-101	38	147	

American Printing House for the Blind

AS THE OFFICIAL schoolbook printery for the blind in the United States, one of the principal functions of the American Printing House for the Blind, in Louisville, Ky., is the provision of special educational books and supplies for the blind school children throughout the country through the Federal Act "To Promote the Education of the Blind." This act, originally passed in 1879, authorizes an annual appropriation to the Printing House for this purpose. Allocations of books and materials are made on a per capita basis. Only those pupils may be registered whose vision comes within the accepted definition of blindness as follows: "Central visual acuity of 20/200 or less in the better eye with correcting glasses, or a peripheral field so contracted that the widest diameter of such field subtends an angular distance no greater than 20 degrees."

The Printing House maintains large catalogs of Braille books, Talking Books, recorded tapes, Braille music publications, large-type texts, and tangible apparatus. A rich collection of educational material is thereby provided for the kindergarten through the high school grades. A total of 7,396 blind pupils was enrolled in the residential schools for the blind and 7,366 in public schools—a total of 14,762 blind pupils being served by the Printing House—for the fiscal year ending June 30, 1961.

During the 1961 fiscal year, Braille books, educational periodicals, and music made up approximately 46.8 percent of the materials required by the schools; Braille slates, Braillewriters, maps, and other mechanical devices about 19 percent; Talking Books about 2.7 percent; recorded educational tapes about 1.5 percent; and large-type books about 28 percent. Approximately 3 percent was used for miscellaneous items.

Gallaudet College

GALLAUDET COLLEGE, established in 1857, is the only institution of higher learning in the world devoted exclusively to the education of the deaf. Public Law 420, 83d Congress, approved June 18, 1954, clearly defines its status as a college, its relationship with the Federal Government, and its responsibility to provide education and training to deaf persons and otherwise to further the education of the deaf.

KENDALL SCHOOL

Primary and secondary schooling is provided for deaf children in the Kendall School, which also serves as a laboratory school for teachers training in the college. The oral method of instruction is used for all pupils except those who make no progress under it. Enrollment last year was 94, of which 85 came from the District of Columbia.

GALLAUDET COLLEGE

In addition to the 4-year undergraduate college, Gallaudet offers a 1-year preparatory course which bridges the gap between the secondary schools for the deaf in the United States and the freshman class in the college. Deaf children of nursery age are taught in the Hearing and Speech Center. Elementary and secondary education for deaf children of the District of Columbia and adjacent States is provided by the Kendall School, a laboratory school serving the college's Department of Education. This department, established in 1891, trains graduate students, both deaf and hearing, for positions as teachers and administrators in schools for the deaf. For the past 4 years the college has offered a summer session for graduate students who wish to earn the master's degree in this field over a period of 4 years. Total enrollment in the college last year was 471, with students from 44 States, the District of Columbia, and 7 foreign countries.

In addition to instruction, the college is also engaged in basic and applied research into deafness. The Office of Psycho-Educational Research and the Office of Social and Environmental Research are concerned with psychological aspects of deafness and with the deaf person's relations to his society. In cooperation with the American

Speech and Hearing Association, the college publishes a quarterly journal of abstracts of current literature in the fields of deafness, speech, and hearing. Research into the communicative abilities of deaf people is a continuing function of the Hearing and Speech Center, as acoustics and electronics are a concern of the Department of Physics. Basic linguistic research into the language of signs used by deaf people has been undertaken for the first time at Gallaudet College and has been in progress for the past 4 years.

Howard University

HOWARD UNIVERSITY, located in the District of Columbia, was chartered by Act of Congress on March 2, 1867. The university offers programs of higher education on the undergraduate, graduate, and professional levels. Undergraduate students are registered in the college of liberal arts; graduate students seeking the master's and doctor of philosophy degrees are registered in the graduate school; professional students are registered in the colleges of medicine, dentistry, pharmacy, fine arts (of which the school of music and the departments of art and drama are parts) and the schools of engineering and architecture, social work, law, and religion. (The school of religion receives no support from Federal funds.)

The educational program of Howard University is conducted in keeping with the democratic purposes of the land-grant colleges and State universities with the low tuition fees and living costs which characterize these State institutions and with an educational program resting upon and permeated by the content and spirit of a general or liberal education. The university admits students of both sexes, from every race, creed, and national origin, but it accepts and undertakes to discharge a special responsibility for the admission and training of Negro students.

ENROLLMENT OF STUDENTS

During the school year 1960-61, the university served a total of 7,898 students as follows: 5,972 during the regular academic year and 1,926 in the summer session of 1960. The total net enrollment, excluding all duplicates, was 6,910, distributed in the 10 schools and colleges as follows: liberal arts, 3,472; graduate school, 723; engineering and architecture, 826; music, 316; social work, 135; dentistry, 722; medicine, 368; pharmacy, 179; law, 105; and religion, 64. This enrollment included a larger number of Negro professional students than in all universities of public support in all the Southern States combined.

GEOGRAPHICAL DISTRIBUTION OF STUDENTS

Of a total of 6,340 students seeking degrees, 5,373, or 84.7 percent, came from 46 States and the District of Columbia while 967 students, or 15.3 percent, came from outside the continental United States including 2 possessions of the United States, 53 foreign countries, and 17 island possessions of the British, French, and Dutch West Indies. This percentage of foreign student enrollment was the largest in any American university.

The 5,373 students from the United States were distributed as follows: New England States, 92; Middle Atlantic States, 878; East North Central States, 321; West North Central States, 83; South Atlantic States, 3,218; East South Central States, 404; West South Central States, 319; Mountain States, 15; and Pacific States, 43.

The 967 students from outside the continental United States came from 53 foreign countries including Canada, 2 countries in the West Indies, 3 countries in Central America, 3 countries in South America, 10 countries in Europe, 15 countries in Africa, 19 countries in Asia and the Middle East, and 17 island possessions of the British, French, and Dutch West Indies.

VETERANS

During the 1960-61 school year, the student enrollment included 475 veterans receiving educational benefits from the Veterans Administration. These veterans were distributed among the 10 schools and colleges as follows: 217 in liberal arts, 31 in the graduate school, 6 in music, 80 in engineering and architecture, 11 in pharmacy, 43 in medicine, 59 in dentistry, 7 in social work, 18 in law, and 3 in religion.

ARMY AND AIR FORCE ROTC

Army ROTC.—There were 494 students enrolled in Army ROTC during the school year 1960-61. Of this number, 264 were in the first-year course, 137 were in the second year, 40 were in the third year, and 53 were in the fourth year. During the year, 36 students were commissioned as reserve officers in the Army.

Air Force ROTC.—There were 445 students enrolled in Air Force ROTC. Of this number, 256 were in the first-year course, 158 were in the second year, 16 were in the third year, and 15 were in the fourth year. During the year 13 students received commissions as reserve officers in the Air Force.

THE FACULTY

A total of 686 teachers served the university during the school year 1960-61. This number included 385 full-time teachers and 301 part-

time teachers. The full-time equivalent of the teaching staff was 457.3. Of this number, 408.3 were teaching in the rank of instructor and above.

From its establishment in 1867, the university has continued to have on its faculty the most learned and able men and women available, selected on the basis of their competence and character, without regard to sex, race, creed, color, or national origin. It was a major purpose of the founders of the university, however, to employ Negro teachers, among others, on every faculty. The Negro members of these faculties continue to constitute a larger group of professional teachers than all Negroes so employed in all other American universities combined. Many of the most outstanding Negroes in the public life of the United States have served on faculties of the university. Such persons include the founder and operator of the first blood-plasma bank, the first Negro governor of an American possession, the first Negro in the Secretariat of the United Nations, and the first Negro member of the United States Court of Appeals.

THE BUILDING PROGRAM

Construction was completed on the auditorium-fine arts building during the fall of 1960, and the building was put into operation at the beginning of the second semester of the 1960-61 school year.

Work was begun in the construction of the home economics building, which is expected to be ready for use at the beginning of the 1962-63 school year. This new building will contain 22,000 square feet of usable space and will provide facilities for work in the general areas of foods and nutrition, clothing and textiles, household furnishings and household equipment, and child development.

In addition, work was begun toward providing plans and specifications for a new classroom building for the college of liberal arts and a new women's residence hall.

GRADUATES

During the 1960-61 school year, there were 673 graduates from the 10 schools and colleges. These graduates came from 37 States, the District of Columbia, the Virgin Islands, Puerto Rico, 20 foreign countries, and 9 island possessions of the British and Dutch West Indies. These 20 foreign countries included Panama, British Guiana, Haiti, 7 countries in Africa, 7 countries in Asia and the Middle East, and 3 countries in Europe.

The 673 graduates were distributed among the 10 schools and colleges as follows: liberal arts, 304; engineering and architecture, 77; music, 15; the graduate school, 42; social work, 49; medicine, 83; den-

tistry, 48; dental hygiene, 5; pharmacy, 11; law, 24; and religion, 15. Three honorary degrees were also conferred.

Since its establishment in 1867, the university has graduated 22,443 persons. The large majority by far of these graduates have been Negroes. Their number represents a larger body of graduates in medicine, dentistry, pharmacy, engineering, music, law, and social work than the entire output of Negro professional graduates in all the publicly supported colleges and universities in the South.

The largest number of graduates has entered the field of teaching, primarily in the Southern States. In the field of medicine there have been 3,167 graduates; 2,479 have entered the practice of dentistry and dental hygiene; 2,433 have entered the field of law; 812 have entered the ministry; 861 have gone into engineering and architecture; and 528 have entered the field of social work. In addition, a large number of graduates has been engaged in government activities.

SERVICE IN FOREIGN COUNTRIES

Teachers and students from Howard University have continued to render distinguished service in foreign countries. They have worked and studied in many parts of the world including West Germany, Italy, Israel, Iran, Iraq, India, Ceylon, Burma, Vietnam, Japan, Indonesia, Egypt, Ethiopia, the Sudan, Kenya, Liberia, Ghana, Nigeria, the Congo, the British West Indies, and British Guiana. Fulbright scholars from Howard University have served in such countries as England, France, Norway, Sweden, Denmark, Italy, Greece, Egypt, Iraq, India, and Ghana.

During the year 1960-61 a number of members of the staff worked abroad in various capacities. The dean of the school of social work served as visiting lecturer and consultant on social work education at the University College of the West Indies. The dean of the college of medicine served as adviser on medical education to aid American and Vietnamese architects in designing a medical center for the faculty of medicine and pharmacy at the University of Saigon. The head of the department of preventive medicine and public health acted as a medical consultant for the United States Operations Mission in Ghana. A professor of architecture completed 2 years of service as architecture-engineering education adviser of the United States Operations Mission in the Sudan.

In September 1960 the university choir completed a tour of more than 11 weeks, during which it visited and gave performances in 18 countries and 34 cities of South and Central America. Some 75,000 Colombians heard the singers during their 2 days in Bogota; 12,000 were on hand for a concert at Mexico City; 10,000 in Buenos Aires; and a standing-room-only audience of 9,000 at Fortaleza, Brazil.

Among the comments made by the press regarding the appearances of the choir, "El Universal" of Mexico City described a performance as "one of the greatest musical events to be applauded by the Mexican capital in the last decade." "El Nacional" of Caracas stated that "this choir should give all Venezuelan students a great example of young, artistic unity, of love for music and culture."

It is apparent that by their services and performances abroad, both students and faculty are continuing to make a valuable contribution to international understanding and are aiding in the improvement of relationships with people in many parts of the world.

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